Placenta Power: For Health and Beauty

A useful guide for those seeking placenta-based remedies

Kentaro Yoshida
Director of the Yoshida Clinic

Preface

There are many things in life which bring us joy. Whatever it is that makes you happy, I'm sure we would all agree that eternal health and youthfulness help us to make the most of life. Although this is easy enough to say, everyone knows eternal health and youth are considerably harder things to realise. Throughout history, whether in the East or the West, we hear of the futile struggles of the rich and powerful to seek out life-extending elixirs whatever the cost.

Well, here in the 21st century, while we still can't perform miracles of health and beauty, an "elixir" that will aid both health and beauty is just now coming into the limelight. That elixir is "Placenta Extract".

Through the placenta, a material produced only at the time of birth in mammals, the mother's body provides nutrition and oxygen to the growing infant, enabling the body to be formed and born. In humans, it is the placenta that causes a fertilised egg to grow to up to 3kg during pregnancy. In other words, the placenta serves as a replacement for various internal organs for the infant embryo. This is why the placenta demonstrates a variety of medicinal effects.

When we are born, even though the outside environment changes our bodies are able to maintain a regular internal environment, such as blood constituency and temperature; in other words, to maintain a homeostatic state. Although of course, if the external environment remains abnormal for a long period we would be unable to maintain a homeostatic state and we would fall ill.

Homeostasis works to create a balance using the hormonal, nervous, and immune systems. We know that the placenta increases natural healing through hormonal regulation, nervous regulation, and immune-regulation, giving the body resistance against disease. We often hear that many modern diseases are caused by free radicals. It is surprising to learn that the placenta has been confirmed to remove free radicals, adding another form of attack to its ability to strengthen the body. In addition to these functions, the placenta acts to improve basic metabolism, strengthen the liver and counteract toxins, counter inflammation, accelerate the recovery of wounds, accelerate muscle formation, promote circulation, promote blood production, counter allergens, regulate the body, and improve the constitution.

Another form of attack the placenta uses is its various growth abilities, such as the ability to accelerate growth of the liver, as observed in the re-growth of cells and organs. This liver regenerative effect alone has been shown in animal testing to be effective for almost all diseases other than cancer, such as hepatitis, cirrhosis of the liver, heart disease, stroke, and renal failure. You can see why the placenta is now viewed by many as a substance which will revolutionise modern medicine.

However wonderful the functions and effects of the placenta, at childbirth it is excreted from the body. Nevertheless, we can make safe and effective use of the placenta for health and beauty by scientifically processing it to produce Placenta Extract. Placenta Extract is made from natural ingredients which means there are no concerns about side effects, giving you peace of mind. Placenta Extract is especially effective for disorders of the nervous system, allergies, and lifestyle illnesses, which are often neglected by western medicine. It is also surprisingly effective for skin problems such as blemishes, wrinkles, and acne. Currently, Placenta Extract is approved for used in Japan in the form of injections (two varieties called "Melsmon" for menopausal disorders and failed lactation, and "Laennec" for liver disorders), as an oral medicine, and also in health foods and make-up products.

This book explains in detail what the placenta is, which diseases it is effective against (menopausal and pre-menopausal disorders, rheumatism, osteoarthritis, neuralgia, atopic skin complaints, bronchial asthma, hay fever, and liver disease) with real-life examples, and how the placenta is used in beauty products. At the end of the book you can find a list of medical organisations using Placenta Extract injections and oral medicines, as well as manufacturers of make-up products using Placenta Extract.

The placenta holds the key to the healthy development of an embryo, and even after we are fully grown, the placenta, in the form of Placenta Extract, plays an active role in the recovery from complaints and disorders arising from day-to-day life. I sincerely hope that this book serves as a useful guide to Placenta Extract, bringing its practical use within reach of all those who want to enjoy their lives in good health.

August 2001

Kentaro Yoshida, Director of the Yoshida Clinic

Contents

Placenta Power: For Health and Beauty

Liver Functions

Section 5 – Examples of Treatment of Menopausal Disorders and Pre-Menopausal Disorders: Rheumatism, Atopic Disorders, and Liver Disease

My menopausal disorders have calmed and my hormone levels have increased
It helped me with my hot flashes, heavy perspiration, tiredness, and irritability
Menopausal disorders and low-blood pressure both improved with twice weekly injections
I have improved health and feel emotionally brighter
I now have improved bodily and psychological resistance, and better physiological strength
I woke up refreshed the day after the injection, and am already feeling the effects
It relieved a range of disorders like chills, stiff shoulders, constipation, and irregular menstruation
I was treated for Hepatitis C, my wife for menopausal disorders and my daughter for menstrual pain
My GOT and GPT went down from 3 to 2 figures, and there was no relapse of liver cancer
I have Hepatitis C, but after 1 month my GOT dropped 103 to 27, and my GPT 85 to 28
I was hospitalised in Taiwan with Hepatitis B, but felt dramatic effects from daily treatment over 2 weeks
My tests for fatty liver and high-blood pressure improved, and I feel great
My bronchial asthma fits were reduced and my symptoms improved
My rheumatism pain disappeared, but I will continue use it to maintain my health
The pain from my osteoarthritis disappeared and now I even enjoy dancing
It worked for my knee pain. Evidence from more than 10 years of personal experience
It improved my atopic skin disorder and I can now even use foundation cream
My contact dermatitis was cured in 1 month. My health is good and my skin clear
My poor vocal chords improved. I've even been told I sound "rejuvenated"
My incurable sarcoidosis was alleviated and there were no side-effects

Section 6 – Beauty Tips! Improve Your Skin with Placenta

Placenta is Highly-Valued in the World of Beauty Products
Blemishes Disappear with Placenta
Wrinkles Improved with Placenta
Acne and Acne Scars Improved
Placenta Doesn't Distinguish Between Skin Types
Works for Young, Mid-Life, and Elderly Skin
Placenta Stimulates Hair Restoration

Section 7 – Placenta Questions and Answers

Afterword

* Conditions Treatable with Placenta

Section 1

The Amazing Power of Placenta

What is the Placenta?

The placenta acts as an agent between the mother's body and the embryo when a new baby is formed in mammals, enabling it to develop and grow using oxygen and nutrients from its mother.
As you can see in Figure 1-1a below, the infant is connected to the mother by the umbilical cord. The umbilical cord is very resilient and elastic and has blood vessels running inside it. The placenta begins to form in around the fifth week after conception and is fully grown by the 13th week. Let's take a brief look at that formation process.
The process begins when the fertilised egg implants itself on the inner wall of the uterus. Then, countless tiny hairs (villi) sprout from the surface of the fertilised egg, and those on the side of the uterine wall begin to grow (the others are lost). This binds the egg to the wall, forming a flat cake shape. This is the placenta.

Figure 1-1a – Structure of the Placenta
[Labels, top to bottom] Placenta, Umbilical Cord

As well as connecting the mother and the embryo, the placenta also acts to separate them. Oxygen and nutrients flow into the placenta in the mother's blood, and are then passed on into the embryo's blood. In the other direction, waste products from the embryo's blood are passed to the placenta and deposited in the mother's blood. The blood of the mother and embryo do not mix in this process. The embryo's blood circulates in the embryo's blood vessels in the villi while the mother's blood merely fills the spaces between the villi [see Figure 1-1b]. This is why an embryo is not rejected even if the blood-type of the mother and embryo are different. Also, if there are any abnormalities in the mother's blood, the placenta acts as a protective barrier for the embryo.

Figure 1-1b – Blood Circulation within the Placenta
[Labels, left side, top to bottom] Mother's Blood, Uterus, Mother's Side, Uterus
[Labels, right side, top to bottom, left to right] Amnion, Chorionic Sac, Intervillous Space, Umbilical Cord, Embryo's Side, Umbilical Artery, Umbilical Vein, Villus

The size of the fertilised egg is initially only around 0.1mm in diameter, but around 280 days later at childbirth the infant has grown to three or four kilograms and around 40cm in height. During this period, the placenta also grows to support the growing infant, reaching a size of 15 to 20cm in diameter, 1.5 to 3cm in thickness, and around 500g in weight by the time of birth. The infant develops rapidly in this short nine month period leading to birth, but the main driver behind this wonder is the placenta. It is primarily thanks to the placenta that mammals are able to undergo the process of live birth. Finally, after the birth of the child the placenta is expelled from the body as part of the birthing process.

The Placenta Acts as a Substitute for an Embryo's Organs

Let's take a closer look at the growth of a fertilised egg.
The fertilised egg implants itself into the uterus wall around one week after fertilisation, and there it begins to separate into three layers of cell groups. Each of these three cell groups will form into a group of organs. At around four weeks the three groups start to develop as follows: skin, brain, spinal cord, teeth, mouth, anus, etc., bones, muscles, blood vessels, kidneys, etc., and oesophagus, stomach, intestines, liver, bladder, etc. At around eight weeks, although still immature, these three groups are fixed and their growth will be rapid.
It is here where another of the placenta's important roles comes into play. As well as providing nutrients and oxygen to the embryo and protecting it, the placenta acts as a substitute for the immature organs as they develop. In other words, the placenta carries out essential functions for the embryo such as

respiration and protein synthesis, breakdown of toxins, hormone secretion, and excretion of waste. The functions performed by the placenta in place of organs can be summarised as follows.

- Functions of the Lungs (Respiration)
  The embryo receives oxygen from its mother's blood via the placenta. Also, carbon dioxide produced by the embryo is deposited in the mother's blood, again via the placenta.
- Functions of the Liver (Metabolism, Detoxification)
  An adult liver operates using up to 200 enzymes and around 500 chemical processes simultaneously (for detoxification functions such as protein synthesis). In an embryo, the liver does not possess enough enzymes to perform detoxification, so the placenta provides the missing functionality. The placenta also breaks down toxins, just like the liver.
- Functions of the Kidneys (Excretion)
  The placenta processes the embryo's waste matter and passes it into the mother's bloodstream.
- Functions of the Pituitary Gland and Ovaries (Endocrine System)
  A vigorously developing embryo needs large quantities of hormones, and it is the placenta which supplies them. Essentially, it provides the hormone secretion functions of endocrine organs such as the pituitary gland or the ovaries.
- Functions of the Spleen (Immune System)
  The placenta acts as a barrier preventing the invasion of viruses and foreign substances.
- Functions of the Small Intestines (Digestion)
  An embryo's only source of protein is amino acids. In the placenta, serum proteins in the mother's blood are digested and broken down into amino acids before being passed to the embryo. Neutral fats are also hydrolysed in the placenta and passed to the embryo.

As you can see, the placenta acts as an agent for various organs for the undeveloped embryo. You might call it an all-purpose organ.

Another important aspect of the placenta is its regulatory function. For example, the placenta prevents the two opposing problems of blood coagulation and bleeding. Think about when you accidentally cut yourself. Normally your blood needs to coagulate before the bleeding can stop. If the blood is prevented from coagulating bleeding wouldn't stop. So, the placenta regulates the blood to create a balance between the two functions, allowing them to co-exist. To put it another way, the placenta needs to prevent coagulation in order to supply blood to the embryo, but it also needs to prevent any bleeding in order to protect the mother. Therefore, the placenta self-regulates to provide whichever function is required at the time. This all-purpose organ constantly strives to maintain the status-quo, providing the regulatory functions essential to life.

The Many Constituents of the Placenta

We have already mentioned a number of physiological aspects of the placenta, but the placenta contains not only the three major nutrient groups: carbohydrates, proteins, and fats, but also a wide range of nutrients such as minerals, vitamins, enzymes, and nucleic acids.

□ Major Nutrients of the Placenta

- Amino acids (the building blocks of proteins) such as leucine, lysine, valine, threonine, isoleucine, glycine, alanine, and arginine.
- Active peptides (amino acid polymers called peptides): Many active peptides have been found to be the key to pharmacological activity.

- Proteins such as albumin, and globulin.
- Fats and Fatty Acids such as cholesterol, phosphatidic acid, phosphatidylethanolamine, lauric acid, and palmitic acid.
- Carbohydrates such as glucose, galactose, and sucrose.
- Mucopolysaccharides such as hyaluronic acid, and chondroitin.
- Vitamins such as vitamin B_1, B_2, B_6, B_{12}, C, D, E, and niacin.
- Minerals such as calcium, sodium, potassium, phosphorus, magnesium, zinc, and iron.
- Nucleic Acids such as DNA, RNA, and metabolic products.
- Enzymes: Close to 100 varieties have been found including alkaline phosphatise, acid phosphatise, hyaluronidase, and adenosine triphosphate.

The Placenta is Amazing! Growth Factors

The placenta is known to possess various physiologically powerful growth factors, which are now attracting a lot of attention.
As mentioned earlier, the placenta makes up for many of the organs of an embryo. In just under 10 months, a single fertilised egg is differentiated into the various organs and built into a full human body, and of course it is the placenta that lies behind this process of differentiation and growth. Central to this process is the placenta's cell activation growth factor, enabling an embryo to grow to up to 3kg inside the uterus. Placental growth factors are processes which promote cell activation, and therefore stimulate cells and promote cell division. This causes the metabolism to increase as old cells are gradually replaced with new ones. Not only that, but its effect is felt across the whole body. You could call placental growth factors "stimulants" which switch on the process of cell division. It is important to note that even tiny quantities demonstrate this power.

□ Main Growth Factors of the Placenta

- Hepatocyte Growth Factor (HGF): Promotes growth of liver parenchymal cells and various tissues.
- Nerve Growth Factor (NGF): Promotes growth of nerve cells (sensory and sympathetic ganglionic cells).
- Epidermal Growth Factor (EGF): Promotes growth of skin, lungs, cornea, and tracheal epithelial cells.
- Fibroblast Growth Factor (FGF): Promotes growth of human fibroblasts, glia cells, and vascular endothelial cells.
- Insulin-like Growth Factor (IGF): Promotes growth of cartilage cells, and smooth muscle cells.
- Growth Factors which Increase Immune Strength
    - Colony-Stimulating Factor (CSF): Promotes growth of stem cells such as immuno-competent cell granulocytes, and macrophages.
    - Interleukin-1 (IL-1): Promotes production of immune-competent cells (T-cells, B-cells, and NK-cells), thymus cells, and lymphokines.
    - Interleukin-2 (IL-2): Promotes growth of T-cells (helper T-cells, killer T-cells, and suppressor T-cells).
    - Interleukin-3 (IL-3): Promotes growth of hematopoietic cells, and mast cells.
    - Interleukin-4 (IL-4): Promotes growth of B-cells, and promotes division of antibody-producing cells.

Growth Factors will revolutionise 21st Century Medicine

□ Regenerative Medicine

On 7th January, 2001, Asahi Shimbun, a Japanese newspaper, carried the sensational headline, "Cell Regeneration Drug to Begin Clinical Use". The article discussed the start of treatment using Hepatocyte Growth Factor (HGF), which has a regenerative effect on cells and organs. It declared that the treatment would revolutionise 21st century medicine.
HGF's regenerative effect on the liver was first verified in 1984 by a research team led by Dr. Toshikazu Nakamura at the Osaka University Graduate School of Medicine's Biomedical Research Center. Later research revealed the effect was not restricted to liver cells and that it prevents necrosis and regenerates almost all organs.
Animal testing revealed that "HGF repairs untreatable serious illnesses of the liver and kidneys, heart, blood vessels, and nervous system". Animals were infected for the purpose the experiment, and when HGF was injected a wondrous effect was observed whereby cells on the verge of death were revived. Thus, animal testing showed it to be effective for almost all diseases except for cancer. It was such an amazing result that people began to refer to HGF as the "Happy Growth Factor".

- Major Diseases which HGF was Effective against in Animal Testing
  Liver Diseases: acute hepatitis, hepatitis, cirrhosis of the liver, and liver transplantation.
  Kidney Diseases: renal failure, kidney transplantation.
  Lung Diseases: acute pneumonia, and lung fibrosis.
  Digestive Diseases: gastric ulcers, and diabetes (pancreatic cell regeneration).
  Cardiovascular Diseases: heart attack, cardiomyopathy, obstructive arteriosclerosis, and prevention of coronary stenosis.
  Muscular Diseases: muscular dystrophy.
  Cranial Nerve Diseases: stroke, Parkinson's Disease, and Lou Gehrig's disease.
  (Asahi Shimbun, 7th January, 2001)

So at last, clinical trials began in earnest to look into whether it would also be effective for humans. Plans for trials are in progress at Osaka University for obstructive arteriosclerosis and heart attack patients and at Hyogo College of Medicine for cirrhosis of the liver sufferers. Nonetheless, thorough data must be accumulated on both effectiveness and safety before this research can be considered as practical treatment, so it is expected to take a little more time.
However, careful readers will have noticed a wonderful thing. Look again at the previous section on Growth Factors and you'll see that HGF is present in placenta. We can make use of the amazing power of HGF, the Happy Growth Factor, right now by using placenta.

□ Discovery of Metastin which Suppresses Progression of Cancer Cells

The wide range of diseases which can be treated using Placenta Extract will be described later, but below is a press release regarding one particular breakthrough.

New Bioactive Peptide "Metastin" Discovered which Suppresses the Spread of Cancer

As a result of research into orphan receptors, Takeda has discovered a bioactive peptide which shows a cancer suppressant effect. The peptide is created by the cancer suppressant gene "KiSS-1", and it has been named "Metastin" after the word "metastasis", meaning the spread of cancer.
Our pioneering first research facility discovered four new peptides called PrRP, Apelin, GALP, and RF amide, during research into orphan receptors. They were found to be receptors for the bioactive peptides MCH, Urotensin II, and Neuromedin U. Animal testing at our second medical science facility has already produced a report in March to the Pharmaceutical Society of Japan that the MCH antagonist shows an

anti-obesity function. The discovery of Metastin is a further result of this continuing research into orphan receptors.
In the current research, ligand peptides of the orphan receptor 0T7T175 are isolated and purified, and found to be a new peptide produced by the KiSS-1 cancer suppressant gene. Gene KiSS-1 was reported on in 1997 by a research group led by Professor Welch at Pennsylvania State University, but only now have the products and functions of this gene been demonstrated.
An experiment was carried out whereby a variety of melanoma in mice was injected subcutaneously, and a tumour allowed to form for five weeks before being transferred to the lungs. There the Metastin receptor 0T7T175 was artificially produced. The spread of the melanoma to the lungs was found to be suppressed significantly by the continuous administering of Metastin. Additionally, in test tube experiments Metastin was confirmed to suppress both migrational response and nociceptive response. This indicates that Metastin inhibits the ability of cells to move, which would explain the cancer suppressant effect within the body.
Further investigation will be required to determine whether Metastin has a similar cancer suppressant effect on human cancer cells, however it is hoped that Metastin will suppress the spread of cancer in ovarian cancer cases, as this has a relatively high frequency of Metastin receptors. Metastin is also present in human placenta in large quantities, suggesting that it's likely that the placenta plays a major physiological role. Initially, we believe that a sustained release and low molecular weight compound of Metastin should be explored with a view to application as a cancer suppressant.
Details of this research were published in Nature on 31st May, 2001.

31st May, 2001
Takeda Pharmaceutical Company Limited

Cancer Suppressant "Metastin" Discovered in Human Placenta

Takeda Pharmaceuticals announced yesterday they have discovered a bodily substance which suppresses the spread of cancer, naming it "Metastin". The gene which produces Metastin was also found. The research was published yesterday in the magazine "Nature". The company hopes to explain the link between the cancer drug and the spreading process. Metastin exists within the body as peptides which can be connected to amino acids. The Takeda research team discovered Metastin in the human placenta. While investigating the arrangement of such amino acids, they found Metastin was produced by the "KiSS-1" gene, which is a known skin cancer suppressant. KiSS-1 was discovered by researchers in the USA in 1997, but it was not known until now that it produced Metastin. In an experiment where skin cancer was introduced to the lungs of mice, Metastin reduced the spread of the cancer by approximately one third.
Asahi Shimbun, 1st June, 2001

Cancer Suppressing Material Found in Placenta Proteins

A new peptide has been found which forms inside the placenta when a certain "receptor" is attached to the cell. The KiSS-1 gene, which suppresses the spread of cancer, was already known, but a new protein named Metastin was discovered which is produced by this gene. In experiments, skin cancer cells in mice were transferred to the lungs, but when Metastin was administered its spread was greatly suppressed.
Nikkei Shimbun, 1st June, 2001

* Articles about the discovery of a substance which suppresses the spread of cancer appeared in both the Asahi Shimbun and the Nikkei Shimbun on 1st June, 2001. This substance exists in large quantities in the placenta. It seems likely that further such substances are just waiting to be discovered in the placenta.

The Medicinal Properties of the Placenta

Many researchers have found that the placenta possesses a variety of medicinal effects, just like in the articles above. When you consider the many nutritional properties and growth factors of the placenta, the "all-purpose organ" seems quite an appropriate description.

□ Main Medicinal Functions of the Placenta

- Nervous System Regulatory Function (specifically the autonomous nervous system)
- Endocrine (Hormonal) System Regulatory Function
- Immune System Function (raises resistance to illness)
- Basal Metabolism Function (energises the metabolism, activating cells, blood vessels and organs)
- Active Oxygen Removal Function (prevents oxidation)
- Anti-inflammatory Function
- Tissue Repair Function
- Tranquilising Function

It has also been shown to have a number of other functions as follows.

- Anti-toxin Function (strengthens the liver)
- Lactation Promotion Function
- Anti-Allergy Function
- Constitution Function
- Circulation Function
- Blood Production Function
- Anti-mutagen Function (suppresses mutations)
- Blood Pressure Regulatory Function
- Fatigue Recovery Function
- Appetite Promotion Function

In addition, the following have been reported by many doctors, as diseases which placenta is effective against. It is clear that the key feature of the placenta is applicability to such a wide variety of conditions. This means that when you treat an illness with placenta it isn't just one illness which is improved, but there are often other general improvements in health and beauty such as waking up refreshed, feeling less tired, or having clearer skin.

□ Placenta Can Treat the Following Conditions

- Gynaecology: menopausal disorders, menstrual pain, irregular menstruation, failure of lactation, and high prolactin levels, etc.
- Internal Medicine: hepatitis, cirrhosis of the liver, chronic pancreatitis, diabetes, chronic gastritis, dyspepsia, gastric ulcers, duodenal ulcer, ulcerative colitis, bronchial asthma, chronic bronchitis, high blood pressure, low blood pressure, habitual constipation, and collagen disease, etc.
- Surgery: chronic rheumatoid arthritis, osteoarthritis, arthritis, neuralgia, lumbago, and stiff shoulders, etc.
- Dermatology: atopic skin complaints, psoriasis, body odour, eczema, chapped skin, spots, and freckles, etc.
- Psychiatry: autonomic ataxia, and sleeplessness, etc.
- Urology: enlarged prostate, cystitis, and haemorrhoids, etc.
- Ophthalmology: cataracts, allergic conjunctivitis, and vision loss, etc.
- Ear, Nose and Throat: allergic rhinitis, Meniere's disease, and hay fever, etc.
- Dentistry: pyorrhoea, and gum disease, etc.

- Other: fatigue, chills, weak constitution, recovery of strength during and after illness, muscularity, and strength of mind, etc.

Effective Use of Placenta for Health and Beauty

Essentially, the placenta is a temporary organ formed to develop the embryo and is expelled after birth.
In most mammals other than humans the mother actually eats the placenta after birth. You may have noticed that when a cat or a dog gives birth, the placenta is left with the mother and child. Even herbivores like cows and horses are known to eat the placenta.
Some reports have it that this is to hide the smell of birthing to protect the young from predators, but a more likely explanation is that the mother recovers strength after the delivery by eating the nutrition-rich placenta. The lactation promotion function is an additional reason. There is a great deal of wisdom in the habits of animals.
Until recently, the tradition in Japan was to use the placenta and umbilical cord as an offering on an altar, to pray for the growth of the child. However, in earlier times when medicines were scarce, if a child became very ill the umbilical cord would be ground into a powder, boiled, and administered as a special medicine.

Placenta is an Old and a New Medicine

Nevertheless, the medicinal properties, nutrients and growth factors of the placenta have been widely used for health and beauty, both in the past and today, and in all corners of the globe.
The placenta has a history of medicinal use starting more than 2000 years ago. It was used as an elixir of eternal youth during the Qin Dynasty in China (259 BC to 210 BC). It appears in a medical text entitled "Honzo Syui" from the Tang Dynasty (618 AD to 907 AD) under the names "Jinho" or "Hoi". It appears again in the Ming Dynasty (1368 to 1644) as "Shikasha" in the book "Bencao Gangmu", where it is prized as a nourishing herbal medicine for physical and mental tiredness and weakness. In Taoism, the elixir used to become a wizard is called "Kasha". Yang Kwei-Fei is said to have often prescribed "Shikasha". In modern times, too, it is an essential ingredient in *Kampo* medicine (the Japanese form of traditional Chinese herbal medicine).
"Shikasha" also appears in a Korean medical text entitled "Dongui Bogam" (1613). In the Edo Period in Japan (1603 to 1868) the same "Shikasha" was one of the three main active agents in a treatment called Kongentan from the town of Kaga in the modern Ishikawa Prefecture.
Also in the West, Hippocrates, a doctor in Ancient Greece called "the father of Western medicine", used placenta in his treatments. Cleopatra and Marie Antoinette are also said to have used placenta for rejuvenation and beauty.
But somehow, while the use of placenta as a traditional medicine has persisted in the East, it has been forgotten in the West since the time of the Middle Ages, and it wasn't until research was done in the 1930s in the Soviet Union that the placenta's usefulness once again saw the light of day.

Prof. Filatov, Dr. Kentaro Hieda, and Now

Professor Filatov was a medical school professor in Odessa in the Soviet Union in the 1930s. His use of placenta in "Tissue Therapy" brought it back into the realm of science. "Tissue Therapy" is a method of treating skin complaints whereby placenta or other organs are frozen and stored. There is a similar treatment called "implanted treatment". Initially, Prof. Filatov performed operations transplanting frozen cornea from deceased donors into patients. He noticed that the prognosis was much better with frozen cornea than with unfrozen. This was the start of Prof. Filatov's research, which founded the thinking that

“if the tissues of plants and animals are refrigerated, the stimulus of the cold environment activates the tissue, inducing cell activation factors and bio-stimulation with regenerative abilities”. Later research built on these ideas, leading to the use of frozen tissues such as the placenta for skin conditions and other illnesses. Thus, “Tissue Therapy” was born. On the effects of the placenta, Prof. Filatov reported that “the placenta not only activates the functions of the whole body, it is also excellent at promoting recovery of diseased areas”. In 1945, Prof. Filatov was awarded the highly influential Lenin Prize for his superb achievements.

Shortly afterwards, “Tissue Therapy” came to Japan. In 1950, a group of physicians researching “Tissue Therapy” got together and established the “Tissue Therapy Research Institute”. After developing Placenta Extract injections, in 1956 they founded “Melsmon Pharmaceutical Company Limited” which quickly obtained government approval, and began manufacture and sale of Melsmon injections as a treatment for menopausal disorders and failed lactation.

Meanwhile, Professor Kentaro Hieda propagated “Tissue Therapy” in Japan via a completely separate route. During World War Two, Prof. Hieda lectured at the Manchurian Medical College, and spent the first eight years after the war in China, where he became acquainted with the “Tissue Therapy” of Professor Splanski. After returning to Japan he lectured at the Physics Research Institute at Kurume University, where he enthusiastically researched uses of the placenta. That research resulted in the development of “Refrigerated Placenta Serum Therapy” which employs extract of refrigerated placenta. Later, in 1959, Placenta Extract injections based on Prof. Hieda’s research came to market under the name “Laennec” (*at that time approval was given from the Japanese government for use in the treatment of hepatitis, but this has now expanded to the treatment of general liver health).

However, this “Tissue Therapy” was not the first use of the placenta in Japan. Its use as a traditional medicine in China was also passed to Japan, and it was used in the Edo Period appearing as one of the three active ingredients in the Kongentan remedy from the town of Kaga.

Also, both during and after World War Two, the placenta treatment “Vita-X” became well-known as a valuable source of nutrition. It was developed by Dr. Ryukichi Mibayashi, a Professor at the Gynaecology Research Laboratory of Kyoto University Medical School. When the food situation was poor at the end and shortly after the war, research was launched at the request of the government due to concerns over the health of infants and pregnant women, and attention turned to the miraculous effects of placenta. As well as improving health problems and promoting growth in infants, it was found to be very efficient in treating liver disease, anaemia and other ailments, as well as aiding post-operative recovery. Now, Vita-X is manufactured and sold as a placenta-based medicine.

The Many Ways the Placenta is Used

Currently, Placenta Extract is available in Japan in the form of injections, as an oral medicine, and as health food and beauty products.

Although various injections have been offered since the 1950s, at the present time two options are available: “Melsmon” injections for menopausal disorders and failed lactation, and “Laennec” injections for improved liver function. The effect of these injections has been approved by the Japanese government, and clinical data and safety tests have been carried out. Needless to say, the practical applications of using placenta are far reaching.

The drug “Vita-X” is a typical example of an oral placenta-based medicine. In the 1970s, placenta began to be applied in the field of beauty products, and a range of make-up products were developed. Since the late 1980s it has also been used in health foods. It is usual for pig placenta to be used in beauty and health food products. Its effectiveness when fresh shows very little difference compared to human placenta. Throughout the whole world, more and more new medicines and beauty products contain Placenta Extract. However, recently its effectiveness and safety for use as a medical treatment has been newly confirmed in Japan, and an increasing number of medical institutions across the country are beginning to offer injections as part of normal range of treatments.

Placenta Extract and Safety

Placenta Extract injections are extracted as a so called organ preparation, meaning safety issues such as infection must be addressed. However, there is no cause for concern. The injections are prepared using human placentas from normal births, and all blood and hormones are 100% removed in the manufacturing process, meaning no blood or hormones are present in the injection whatsoever. Of course, all medicines whether injection or oral must pass standards and be approved by the government.

Let's take the example of Melsmon injections, and see what safety measures are taken by the manufacturers in its production. The first aspect is in the control of raw materials. Over many years a system for the reliable and safe acquisition of placenta has developed involving multiple specialist contracts between medical organisations. As all mothers will know, blood tests are taken many times during pregnancy, and tests for syphilis, AIDS, Hepatitis B, Hepatitis C, and so on are made, ensuring that only infection-free placentas are selected. This careful management of materials doesn't only protect the patient and medical personnel, but prevents infection spreading to those working in the manufacture, and is a critical step in the process. Next, placentas which passed the screening process are refrigerated for a fixed period, before being heated in hydrochloric acid and broken down into a water-soluble material (extract). Then, the hydrochloric acid is evaporated and neutralised to pH 6.8 ~ 7.0 with sodium hydroxide (the pH of blood), distilled water and benzyl alcohol is added and filtered to prevent pain and tissue damage during the injection. This breakdown and evaporation process involves a total of 15 to 17 hours of heat treatment at over 100^{o}C. As a final step, the Placenta Extract is loaded into a sterilised ampoule and high pressure steam sterilization is carried out at 120^{o}C for 30 minutes.

Safety is ensured by using materials carefully screened for infection in medical institutions, using heat treatment in the manufacturing process (a total of 15 to 17 hours at over 100^{o}C), and using a sterilising treatment on the final product (30 minutes at 120^{o}C), so that any bacterium or virus is denatured. Then, a test to confirm whether proteins are completely broken down into amino acids, sterilisation tests, and animal testing are carried out as final product checks.

There are also minimal concerns regarding side-effects. Melsmon has been licensed under Japanese health insurance for 45 years and in the long history of the manufacture and sale of Melsmon injections there hasn't been a single reported incident of major side-effects. The history of the use of placenta for health and beauty since ancient times is itself a testimony to the low incidence of side-effects. In my clinic we have never had a single incident of side-effects due to placenta injections. Only minor side-effects have been observed such as "reddening or pain at the point of injection (5% of cases, recovers in 1 to 2 days)", "heaviness in upper arm (0.1 to 5% of cases, recovers in half a day)", "nausea or general malaise (very rare, recovers in half a day)". However all were quickly cured leading to a revitalised feeling and a strengthened constitution.

As there are so few side-effects, patients say they can bathe, exercise, and drink alcohol as normal on the day of the injection.

Section 2

Relieving Menopausal Disorders with Placenta

The Perimenopause is the 5 Year Period either side of the Menopause

While there are still many people who mistakenly think the perimenopause is the period after menstruation ceases, in truth it is the five years either side of the menopause, a total of around 10 years. The exact age depends on the person, but there are those who reach it in their thirties and others who aren't affected until their late fifties. In Japan, the average is around 50 or 51, and in this case the perimenopause would be from around 45 to 55.
Often you will only know the age you entered the perimenopause after you come to the menopause itself. A disturbed menstrual cycle is a good sign, which happens due to a weakening of the functions of the ovaries. In bodily terms, the perimenopause is the "transition period" from regular menstruation to a stable state of non-menstruation. In short, as well as a decline in the functions of the ovaries, the ovaries secrete less and less female hormones, before dropping sharply at the menopause, and finally ceasing completely and settling down.
The changes in hormone production across a woman's life can be categorised into five phases: childhood, puberty, sexual maturity, the perimenopause, and old age.
(1) Childhood: Secretion of female hormones begins from around 8 years.
(2) Puberty: Some time before the age of 20 menstruation begins, the reproductive organs and breasts develop, and the body becomes more womanly.
3) Sexual Maturity: During the 25 year period from 20 to 45 female hormone production peaks, enabling conception, childbirth, and nursing.
(4) Perimenopause: The 10 year period from 45 to 55 centres on the menopause and the transition into old age.
(5) Old Age: Production of female hormones in the ovaries ceases.

Here we can see that the perimenopause comes in between sexual maturity and old age, so can be thought of as a preparatory phase to comfortably entering old age. From this fact alone we can imagine the many turning points and changes taking place, and the heavy blows taken by the body and mind, which makes it all the more important that the transition is made as smooth as possible.

Menopausal Disorders are a General Malaise around the Menopause

During the menopause the secretion of female hormones decreases due to a drop in the functions of the ovaries, however this shortage of female hormones produces vague bodily disorders or a mental and physical general malaise, and we call these menopausal disorders. Commonly experienced conditions are as follows.

Psychological Disorders
Heaviness of the head, headaches, trouble falling asleep, light sleep, early waking, tiredness, fatigue, anxiety, tenseness, irritability, and mild depression.

Physical Disorders
Hot flashes or rushes of blood, dizziness or giddiness, heavy perspiration, palpitations or shortness of breath, chills, loss of appetite, nausea, distended abdomen, constipation, diarrhoea, still neck or shoulders, joint pain, hip pain, frequent urination, and eyestrain.

It is not unusual for many of these menopausal disorders to manifest together all at once. This is the main factor which makes the treatment menopausal disorders difficult.

Why Menopausal Disorders Occur

So, why do menopausal disorders occur? In answering that question we must first understand the relationship between menstruation and female hormones (estrogen and progesterone). Estrogen performs many important functions and progesterone is the hormone which controls estrogen. Menstruation is a phenomenon whereby the membrane which lines the inner surface of the uterus peels off and falls away at a regular cycle, and occurs due to the mutual stimulation of the hypothalamus and pituitary gland in the brain, and the ovaries [See Figure 2-1].

Figure 2-1 – Function of Sexual Functions and Female Hormones
[Labels: top 5, left to right] Hypothalamus, Pituitary Gland, Follicle Stimulating Hormone, Progestagen, Gonadotropic Hormone-Releasing Hormone
[Labels: bottom 5, left to right] Ovaries, Uterus, Female Hormones, Estrogen, Progesterone

□ Cycle of Menstruation [See Figure 2-2]

(1) The hypothalamus secretes "Gonadotropic Hormone-Releasing Hormone", which stimulates the pituitary gland. This stimulus causes the pituitary gland to secrete "Follicle Stimulating Hormone".
(2) "Follicle Stimulating Hormone" stimulates the ovarian follicles in the ovaries, one of which begins to mature. Then the ovarian follicle secretes estrogen. Estrogen thickens the lining of the uterus in preparation for pregnancy.
(3) As estrogen builds up in the bloodstream, this information is passed to the hypothalamus and pituitary gland, and secretion of "Follicle Stimulating Hormone" is reduced, and instead "Progestagen" is secreted. This causes one egg to be released or ovulated, by stimulating the matured ovarian follicle.
(4) After the egg is released, the ovarian follicle begins to secrete "progesterone" rather than "progestagen", and this prepares the uterus lining to help the fertilised egg to attach.

Figure 2-2 – Periodic Changes in a Normal Menstrual Cycle
[Labels: first graph, left to right] Gonadotropic Hormones, Progestagen, Follicle Stimulating Hormone
[Labels: second graph, left to right] Ovarian Hormones, Estrogen, Progesterone
[Labels: first row of 5 labels] Follicle, Mature Follicle, Released Egg, Corpus Luteum, Corpus Albicans
[Labels: second row of 5 labels] Uterus Lining, Menstruation, Proliferation Phase, Secretion Phase, Menstruation
[Labels: bottom boxes left to right, top to bottom] Menstrual Cycle (28 Days), 1st Day, Menstruation, Proliferation Phase, Secretion Phase, 28th Day

(5) If it is not fertilised, the corpus luteum regresses, secretion of "progesterone" falls, and the thickened wall of the uterus comes unstuck beginning menstruation. Finally, the hypothalamus once again secretes "Gonadotropic Hormone-Releasing Hormone", and steps (1) through (5) cycle through again.

The menstrual cycle normally takes 28 days. Basal body temperature changes according to a bi-weekly rhythm, with low temperature for the two weeks when estrogen alone is produced and high temperature for the two weeks when progesterone is secreted. So, as we have mentioned, entering the perimenopause means a weakening of the ovaries and a reduction in female hormone production. In response to the reduction in female hormone production, the hypothalamus and pituitary gland begin to secrete Gonadotropic Hormone-Releasing Hormone and Follicle Stimulating Hormone in large quantities, instructing the ovaries to work harder and harder to secrete female hormones. It is this which has an undesired effect on the nervous system (specifically the autonomous nervous system).
This is because the hypothalamus isn't just the control centre for female hormones. It also controls the nervous system. When the hypothalamus works hard to produce Gonadotropic Hormone-Releasing Hormone and Follicle Stimulating Hormone, the nervous system is also stimulated. Consequently, the nervous system loses its balance, eventually leading to autonomic disorders such as ataxia.

Autonomic nerves are present in various bodily organs where they regulate the organ's functions. The two main types of autonomic nerves are sympathetic nerves and parasympathetic nerves, which work in tandem against each other to contract and expand blood vessels and trachea, raise and lower blood pressure, and restrict and stimulate the intestines and digestive tract, thus keeping balance and regulating the body [See Figure 2-3]. Therefore, if the balance of the sympathetic and parasympathetic nerves is lost a number of general disorders arise such as hot flashes, heavy perspiration, palpitations, shortness of breath, constipation, or chills.
While there are some factors which cause menopausal disorders which we don't fully understand, we can give a summary as follows: "decline in functions of ovaries → reduction in female hormones → strong stimulation from hypothalamus → disorder in nervous system → autonomic disorders = general malaise". Also, the female hormone estrogen has been shown to promote happiness, so if it is reduced a psychological effect causing depression can be expected.

Figure 2-3 – Function of the Parasympathetic Nervous System
[Labels: left to right, top to bottom]
Pupil, Constricted, Secretion of Saliva from the Salivary Gland, Stimulation, Bronchial Tube, Constriction, Lungs, Constriction, Heartbeat, Restricted
Liver, Stomach, Digestion, Stimulation, Secretion of Digestive Fluids, Stimulation, Large Intestines, Small Intestines, Blood Pressure Falls
Hair Erector Muscle, No Effect, Surface Blood Vessels, No Effect, Bladder, Enlarged

Common Menopausal Disorders: Hot Flashes, Rushes of Blood, Excessive Perspiration

The most common of the menopausal disorders are hot flashes, rushes of blood and excessive perspiration. Hot flashes are a sudden feeling of intense heat lasting from two to thirty minutes which disappears just as quickly. The condition differs from person to person with some experiencing only a flushed face and others experiencing a hot upper body and cold lower body. The cause of the condition, as mentioned earlier, is thought to be the reduction in estrogen causing the hypothalamus to increase its level of stimulation, which causes the nervous system to go out of balance.
The autonomous nerves in our bodies react to the stimuli of heat and cold. Specifically, sympathetic nerves reduce body temperature by constricting blood vessels and reducing the flow of blood, whereas parasympathetic nerves increase body temperature by widening blood vessels and increasing the flow of blood. Together they control body temperature by keeping blood flow and body temperature constant. However, when the autonomous nerves are out of balance, this control function is impaired and the constriction or widening of blood vessels can be extreme, causing hot flashes.
Be aware that hot flashes can also occur with conditions like high-blood pressure or hyperthyroidism, so if symptoms are severe you should always get a doctor's opinion. If it is diagnosed as a menopausal disorder, it might be several months or even several years before symptoms recede, which is why it is important to face such symptoms with a positive attitude. The reason is because many of the conditions caused by an unbalanced nervous system are also strongly linked to stress, meaning excessive worrying can worsen the symptoms.
As well as hot flashes, or independently of them, excessive perspiration, or night sweats if at night, is also a common condition. Excessive perspiration also occurs because of the reduction in estrogen and an unbalanced nervous system.

Heavy and Light Sufferers

Of course, not all people will experience menopausal disorders upon entering the perimenopause. Even if menopausal disorders are experienced, they can differ markedly depending on the person, and can be

extremely varied and wide-ranging. You might say there are as many experiences as there are people, from those who experience mild discomfort, to those whose lives are seriously affected. But why is there such a range? Of course ones health and body-type have a big influence, but ones environment and lifestyle are also major factors.
The perimenopause represents a turning point in the life of many women. Often it is a time when things like caring for parents, the retirement of a partner, children's independence or marriage, all overlap, and if you are working as well that just adds a further layer of responsibility. So, when the cerebral limbic cortex, which governs all the emotions, and the cerebral cortex, which governs advanced intelligent activity (see Section 3), are bombarded with all this environmental stress, the hypothalamus is very susceptible. People who are easily stressed also tend to be more susceptible, and experience worse menopausal disorders. Perfectionists, as well as introverted or nervous people should take particular care. On the other hand, if you are easy-going, always think positively and are often in a good mood, this will be a positive stimulus for the cerebral cortex and the cerebral limbic cortex, providing a good influence on the hypothalamus and easing any related conditions.
Therefore, the secret to relieving menopausal disorders is to practise turning your mood around, and to avoid irritation and worry. In any case, there are many factors which can cause the onset of menopausal disorders, such as bodily causes due to the reduction in female hormones, a plethora of environmental causes at a turning point in life, or psychological causes making the body susceptible to stress", so it is essential for the treatment to have multiple aspects as well.

Placenta as a Treatment

If symptoms are light it may be best to simply wait and see how things develop, however if menopausal disorders impact on your day-to-day life, treatment should be sought.
In my clinic we use "Melsmon" Placenta Extract injections, a government-approved treatment for menopausal disorders in Japan, combined with herbal medicines depending on the symptoms, and have had extremely good success.
"Melsmon" has been an approved treatment of the Japanese government for 45 years, and its effectiveness and safety are assured, "showing striking effectiveness at improving various symptoms of the transition from the perimenopause to old age."
As described earlier, menopausal disorders arise because of the sudden fall in estrogen levels caused by the reduction in the functions of the ovaries, which stimulates an organ in the brain which controls female hormones called the hypothalamus, causing an imbalance in the nervous system which manifests in the form of a general malaise. The role of placenta in treating menopausal disorders has been shown in animal testing to be a "Secretion Regulatory Function" which creates balance in the hormone system, and a "nervous system regulatory function" which creates balance in the nervous system. In addition to this regulatory function, placenta demonstrates a wide range of medicinal effects such as "Basal Metabolism Function", "Circulation Function", "Blood Production Function", "Fatigue Recovery Function", "Anaemia Improvement Function", "Immune System Function", and "Constitution Function", and as these effects act in unison they have the power to relieve a wide range of symptoms all at once.

Effective Herbal (*Kampo*) Medicines

The basic principle for my own treatments is to utilise the wisdom of both Western and Eastern medicine, and use this to offer the optimum treatment to the patient.
Since ancient times, Kampo medicines have been known to be useful in treating menopausal disorders. Originally it was said that Kampo medicines worked because they "restore the body's balance, and thus cure the disease." Perhaps these Kampo remedies work because many symptoms of menopausal disorders are triggered by an imbalance in the nervous system. In other words, rather than "identifying which part

of the body is malfunctioning" as would be the norm in Western medicine, Kampo medicine emphasises "finding the body's natural defences and functions and helping the whole body back to health." In doing this, you might say that Western medicine examines diseases, and Kampo medicine examines the patient.
Therefore, a person with multiple symptoms of menopausal disorders such as chills, stiff shoulders, or mild depression, for example, would require multiple treatments such as internal medicine, orthopaedics, or psychiatry under Western medicine, but under Kampo medicine the "*sho*" is diagnosed and medicine administered appropriately based on the patient's constitution and symptoms. In Kampo medicine, *sho* means the patient's condition in terms of the type, symptoms, state, and stage of the illness. Diagnosis is made focussing on the *sho* of each patient, types of which include *Jitsu, Kyo, Netsu,* and *Kan* (excess, deficiency, heat and cold). *Jitsu* and *Kyo* measure qualitative excesses or deficiencies of the physical body. A *Jitsu-Sho* diagnosis is a state of illness due to excess bodily strength, and a *Kyo-Sho* diagnosis is a state of illness due to deficient bodily strength. *Kan* and *Netsu* measure characteristics of the disease. A *Kan-Sho* diagnosis is a state where the illness mainly lowers the metabolism, and a *Kyo-Sho* diagnosis is a state where the illness mainly accelerates the metabolism. There is also "*Yin-Yang*" which measures the strength or weakness of the body's resistive power, and "*Hyo-Ri*" which measures the depth of the illness.
The status of an illness is also placed into one of three hypothetical groups relating to the cause: "*Ki*", "*Ketsu*", and "*Mizu,*" although menopausal disorders are generally classed as "*Ki-Tai*" or "*O-Ketsu*." "*Ki-Tai*" means illnesses caused by stagnant energy such as hot flashes, palpitations, shortness of breath, anxiety, bad temper, or depression, whereas "*O-Ketsu*" means illnesses caused by stagnant blood such as chills, headaches, stiff shoulders, ringing ears, irregular menstruation, or abdominal pain.
In Kampo medicine the appropriate herbal medicine is selected based on the analysis of the patient's *Sho* and *Ki - Ketsu - Mizu* state. It stresses the healing power of the body and is a prescription using both causal and symptomatic therapies.
Kampo remedies also have the effect of stabilising the mind. [Figure 2-4] is a simple chart showing Kampo remedies selected according to the *Jitsu-Kyo* diagnosis of menopausal disorders. Many Kampo remedies are made from natural ingredients such as medicinal roots and bark, meaning there are minimal concerns over side-effects.
Viewed from this perspective, Kampo and placenta remedies have substantial overlap. Indeed, placenta has been used in modern medicine as the Kampo herb "Shikasha," the only Kampo remedy to be passed to Western medicine. My clinic is proof that menopausal disorders can be effectively treated using a combination of Kampo remedies and placenta to suit the patient. Drug treatments for menopausal disorders include symptomatic therapies such as tranquilisers, sleeping pills, or sedatives to calm an imbalanced nervous system, or supplements such as injections, oral medicine or skin patches to replace the missing female hormones.

Figure 2-4 – Simple Prescription Chart by Diagnosis of Menopausal Disorder
[Labels: left column, top to bottom] *Jitsu-Sho*, *Kyo-Sho*
[Labels: middle column, top to bottom] Tokaku-jokito, Keishi-bukuryo-gan, Tsu-do-san, Kami-shoyo-san, Toki-shakuyaku-san, Shimotsu-to
[Labels: right column, top to bottom] Stiff Shoulders / Hot Flashes / Headaches, Constipation, Dizziness / Ringing in the Ears, Stiff Shoulders, Irritability, Chills, Dry Skin

However, tranquilisers and sleeping pills all have issues with side-effects, and hormone supplements rely on knowing the amount of hormone appropriate to the condition of each patient, as well as having their own side-effects. This is where placenta and Kampo remedies excel, with next to no worries about side-effects, and relief for both the symptoms and the causes through the regulatory function. This is the reason I use them in my treatments.

Clinical Data Shows "Melsmon" Works

This chapter presents some very interesting clinical data from pharmaceutical companies examining the effectiveness of “Melsmon” for menopausal disorders. It was a comparative clinical test conducted by seven medical organisations which took place between March and December in 1980, with 55 test patients, 31 of whom were selected at random to receive “Melsmon”, with the remaining 24 receiving a placebo (a replica treatment with no clinical effect). The dose was a 2ml injection three times per week, for two weeks, a total of six injections.
The main complaints at the start of the treatment were as per [Table 2-1]. The group receiving Melsmon saw improvements as shown below after four and then six treatments.

□ General Level of Improvement
After four treatments, four cases in the group receiving Melsmon saw “very effective” effects, while none were seen in the group receiving the placebo [Table 2-2].

Symptom		Great	Some	A Little	Total
Psychological Symptoms	Heavy Head	3	5	18	26
	Headache	3	11	17	31
	Trouble Sleeping	1	7	17	25
	Light Sleeping	0	7	18	25
	Early Waking	0	9	12	21
	Fatigue	1	22	15	38
	Washed-Out	0	12	16	28
	Anxiety	4	5	15	24
	Tension	3	5	18	26
	Irritability	3	11	18	32
	Depression	2	7	16	25
Physical Symptoms	Hot Flashes	2	16	18	36
	Dizziness	2	12	18	32
	Heavy Perspiration	0	9	12	21
	Palpitations	2	6	23	31
	Chills	3	18	8	29
	Loss of Appetite	0	4	11	15
	Nausea	0	1	13	14
	Abdominal Swelling	0	9	18	27
	Diarrhoea	0	0	4	4
	Constipation	1	9	14	24
	Stiff Neck	6	20	12	38
	Stiff Shoulders	6	23	10	39
	Joint Pain	1	3	9	13
	Hip Pain	2	15	16	33
	Frequent Urination	0	1	11	12
	Eye Strain	3	5	15	23

Unit: People

Table 2-1 – Main Complaints at Start of Treatment

After two weeks of treatment a large statistical difference in effectiveness was observed with 77.4% seeing an “effective” or “very effective” effect in the Melsmon group compared to 25.0% in the placebo group [Table 2-3].

□ Level of Improvement by Symptom

(1) Psychological Symptoms
A difference could already be seen between the Melsmon and placebo group after just four treatments [Table 2-4]. After two weeks of treatment a large statistical difference was again observed with 67.8% saying “effective” or “very effective” for the Melsmon group compared to 25.0% for the placebo group [Table 2-5].

(2) Physical Symptoms
After four treatments there were 12 cases where Melsmon was more effective, however no significant difference was yet observed overall [Table 2-6]. After two weeks of treatment a very significant difference was observed between the Melsmon and placebo groups. The total seeing “effective” or “very effective” results was 77.4% for the Melsmon group and only 29.2% for the placebo group, which represents a statistical confirmation [Table 2-7].

	Very Effective	Effective	Quite Effective	Not Effective	Worsened	Total	Very Effective + Effective
Melsmon	4 (12.9)	8 (25.8)	6 (19.4)	12 (38.7)	1 (3.2)	31 (100)	12 (38.7)
Placebo	0	4 (16.7)	3 (12.5)	13 (54.1)	4 (16.7)	24 (100)	4 (16.7)
Total	4	12	9	25	5	55	16

Unit: People, ( ): %

Table 2-2 – Overall Level of Improvement after Four Treatments

	Very Effective	Effective	Quite Effective	Not Effective	Worsened	Total	Very Effective + Effective
Melsmon	15 (48.4)	9 (29.0)	3 (9.7)	4 (12.9)	0	31 (100)	24 (77.4)
Placebo	4 (16.7)	2 (8.3)	4 (16.7)	13 (54.1)	1 (4.2)	24 (100)	6 (25.0)
Total	19	11	7	17	1	55	30

Unit: People, ( ): %

Table 2-3 – Overall Level of Improvement after Two Weeks

	Very Effective	Effective	Quite Effective	Not Effective	Worsened	Total	Very Effective + Effective
Melsmon	5 (16.1)	4 (12.9)	8 (25.8)	13 (41.9)	1 (3.3)	31 (100)	9 (29.0)
Placebo	0	2 (8.3)	2 (8.3)	13 (54.2)	7 (29.2)	24 (100)	2 (8.3)
Total	5	6	10	26	8	55	11

Unit: People, ( ): %

Table 2-4 – Level of Improvement to Psychological Symptoms after Four Treatments

	Very Effective	Effective	Quite Effective	Not Effective	Worsened	Total	Very Effective + Effective

Melsmon	12 (38.8)	9 (29.0)	5 (16.1)	5 (16.1)	0	31 (100)	21 (27.8)
Placebo	2 (8.3)	4 (16.7)	4 (16.7)	12 (50.0)	2 (8.3)	24 (100)	6 (25.0)
Total	14	13	9	17	2	55	27

Unit: People, ( ): %

Table 2-5 – Level of Improvement to Psychological Symptoms after Two Weeks

	Very Effective	Effective	Quite Effective	Not Effective	Worsened	Total	Very Effective + Effective
Melsmon	5 (16.1)	7 (22.6)	6 (19.4)	13 (41.9)	0	31 (100)	12 (38.7)
Placebo	1 (4.2)	2 (8.3)	5 (20.8)	15 (62.5)	1 (4.2)	24 (100)	3 (12.5)
Total	6	9	11	28	1	55	15

Unit: People, ( ): %

Table 2-6 – Level of Improvement to Physical Symptoms after Four Treatments

	Very Effective	Effective	Quite Effective	Not Effective	Worsened	Total	Very Effective + Effective
Melsmon	13 (41.9)	11 (35.5)	2 (6.5)	5 (16.1)	0	31 (100)	24 (77.4)
Placebo	4 (16.7)	3 (12.5)	8 (33.3)	8 (33.3)	1 (4.2)	24 (100)	7 (29.2)
Total	17	14	10	13	1	55	31

Unit: People, ( ): %

Table 2-7 – Level of Improvement to Physical Symptoms after Two Weeks

These results show that Melsmon is effective in improving the symptoms of menopausal disorders, and that improvement is seen for both psychological and physical symptoms, as an overall improvement. Furthermore they show that results are comparatively quick.

Using the "Simple Menopause Index"

The “Simple Menopause Index” (SMI) is a self-check table for measuring the severity of menopausal symptoms [Table 2-8]. The table organises menopausal disorders into 10 categories, and the user simply circles the severity of each symptom in the table and then adds them up. The final evaluation can then be looked up using that total.
Menopausal disorder patients in my clinic fill in this SMI table. This way, the severity of the symptoms is captured before any treatment begins at the initial examination, and can be referenced later on to assess the success of the treatment. Presented below are the changes in the SMI of two patients who have used a combination of placenta and Kampo remedies for menopausal disorders.

Simple Menopause Index (SMI)
Circle the severity of each type of symptom which fits best and enter the number in the box to the right, then add them up and check your evaluation below. Select “Heavy” for whichever of your symptoms is strongest.

Symptom	Heavy	Medium	Light	None	Points
(1) Flushed Head	10	6	3	0	
(2) Heavy Perspiration	10	6	3	0	
(3) Cold Hips and Limbs	14	9	5	0	
(4) Shortness of Breath, Palpitations	12	8	4	0	
(5) Poor or Light Sleep	14	9	5	0	
(6) Bad Temper, Irritable	12	8	4	0	
(7) Broody, Occasional Depression	7	5	3	0	
(8) Headaches, Dizziness, Nausea	7	5	3	0	
(9) Fatigue	7	4	2	0	
(10) Stiff Shoulders, Hip or Limb Pain	7	5	3	0	
	Total Points				

Menopausal Index Self-Evaluation
0~25 Points: You are bearing the menopause well. You should continue with your normal activities.
26~50 Points: Pay attention to food and exercise, and take it easy.
51~65 Points: Get a doctor's opinion, and think about guidance, counselling or treatment.
66~80 Points: You should be looking at a long-term (6 months or more) course of treatment.
81~100 Points: Get detailed checks with a number of specialists, and if it is only menopausal disorders, obtain long-term specialist treatment.

Table 2-8 – Simple Menopause Index (SMI) Self-Check Sheet

Initial Examination: 20/Nov/2000, Re-Examination: 12/Dec/2000

Simple Menopause Index (SMI)
Circle the severity of each type of symptom which fits best and enter the number in the box to the right, then add them up and check your evaluation below. Select "Heavy" for whichever of your symptoms is strongest.

	(Before Treatment)					(After Treatment)				
Symptom	Heavy	Medium	Light	None	Points	Heavy	Medium	Light	None	Points
(1) Flushed Head	(10)	6	3	0	10	(10)	6	3	0	10
(2) Heavy Perspiration	10	(6)	3	0	6	10	(6)	3	0	6
(3) Cold Hips and Limbs	(14)	9	5	0	14	14	(9)	5	0	9
(4) Shortness of Breath, Palpitations	(12)	8	4	0	12	12	(8)	4	0	8
(5) Poor or Light Sleep	(14)	9	5	0	14	14	(9)	5	0	9
(6) Bad Temper, Irritable	(12)	8	4	0	12	12	8	(4)	0	4
(7) Broody, Occasional Depression	(7)	5	3	0	7	7	(5)	3	0	5
(8) Headaches, Dizziness, Nausea	(7)	5	3	0	7	7	5	(3)	0	3
(9) Fatigue	(7)	4	2	0	7	7	(4)	2	0	4
(10) Stiff Shoulders, Hip or Limb Pain	(7)	5	3	0	7	(7)	5	3	0	7
	Total Points				96	Total Points				65

Menopausal Index Self-Evaluation

0~25 Points: You are bearing the menopause well. You should continue with your normal activities.
26~50 Points: Pay attention to food and exercise, and take it easy.
51~65 Points: Get a doctor's opinion, and think about guidance, counselling or treatment.
66~80 Points: You should be looking at a long-term (6 months or more) course of treatment.
81~100 Points: Get detailed checks with a number of specialists, and if it is only menopausal disorders, obtain long-term specialist treatment.

Table 2-9

Initial Examination: 13/Nov/2000, Re-Examination: 29/Dec/2000

Simple Menopause Index (SMI)
Circle the severity of each type of symptom which fits best and enter the number in the box to the right, then add them up and check your evaluation below. Select "Heavy" for whichever of your symptoms is strongest.

	(Before Treatment)					(After Treatment)				
Symptom	Heavy	Medium	Light	None	Points	Heavy	Medium	Light	None	Points
(1) Flushed Head	(10)	6	3	0	10	10	6	(3)	0	3
(2) Heavy Perspiration	(10)	6	3	0	10	(10)	6	3	0	10
(3) Cold Hips and Limbs	(14)	9	5	0	14	14	(9)	5	0	9
(4) Shortness of Breath, Palpitations	(12)	8	4	0	12	(12)	8	4	0	12
(5) Poor or Light Sleep	14	9	5	0		14	9	(5)	0	5
(6) Bad Temper, Irritable	12	8	4	0		12	8	4	(0)	
(7) Broody, Occasional Depression	(7)	5	3	0	7	7	5	3	(0)	
(8) Headaches, Dizziness, Nausea	7	5	3	0		7	5	3	(0)	
(9) Fatigue	(7)	4	2	0	7	(7)	4	2	0	7
(10) Stiff Shoulders, Hip or Limb Pain	(7)	5	3	0	7	(7)	5	3	0	7
	Total Points			67		Total Points			53	

Menopausal Index Self-Evaluation
0~25 Points: You are bearing the menopause well. You should continue with your normal activities.
26~50 Points: Pay attention to food and exercise, and take it easy.
51~65 Points: Get a doctor's opinion, and think about guidance, counselling or treatment.
66~80 Points: You should be looking at a long-term (6 months or more) course of treatment.
81~100 Points: Get detailed checks with a number of specialists, and if it is only menopausal disorders, obtain long-term specialist treatment.

Table 2-10

As you can see in [Table 2-9] and [Table 2-10], both patients saw superb results in a comparatively short time, providing great evidence of the power of combining placenta and Kampo medicinal treatments. Also, no side-effects were experienced in either case.

Illnesses Linked to the Menopause

When there is a shortage of the female hormone estrogen due to the reduction in the functions of the ovaries, this can lead to diseases such as osteoporosis, hardening of the arteries, or atrophic vaginitis [Table 2-11]. Severe problems caused by a deficiency of estrogen can be split into two broad groups.

There are “acute symptoms of menopausal disorders” which arise from imbalance of the nervous system during the menopause, and there are “late onset symptoms of menopausal disorders (also called old age disorders)” such as osteoporosis, hardening of the arteries, or atrophic vaginitis, which may take time before they are identified. Treatment of late-onset symptoms of menopausal disorders is difficult; however, as they can often be protracted it is advisable to stay alert.
The development of these late-onset symptoms is not solely due to the role of estrogen in reproduction, but is a result of a variety of functions it performs including preventing calcium from leaking out of bones, reducing cholesterol, and stimulating production of vaginal epithelial cells. To put it simply, the drop in the production of estrogen reduces all of these functions, which is connected to the development of late-onset symptoms.

Age		Main Illnesses / Complaints
45		
50	Perimenopause	Menopausal Disorders [chills, hot flashes, headaches, menopausal keratosis, skin problems, palpitations, dizziness, ringing in the ears, diarrhoea, constipation, urinary problems, sleeplessness, irritability, forgetfulness] Breast Cancer, Uterine Cancer, Hardening of the Arteries
60 70	Old Age	Heart Disease, Diabetes, Hyperlipidaemia Liver Disease, Stiff Shoulders, Osteoporosis Neurosis, Psychosomatic Illness, Masked Depression Hypothyroidism, Bone Fracture Asteatotic Eczema, Collagen Disease Dementia

Table 2-11 – Common Diseases (Female)

□ Osteoporosis
Recently, osteoporosis has received a lot of attention as a common post- menopausal disease in women. Osteoporosis is a disease where the calcium inside bones is lost and the bones lose density (bone mass), which causes brittle bones, bending of the spine, and bone fractures. A common location of bone fracture among sufferers of osteoporosis is the base of the thigh bone, or femoral neck, which often leaves elderly people bed-ridden, and at times advances to dementia.
However, estrogen has been confirmed to play an important role in preserving bone mass. When estrogen production drops sharply following the menopause, there is a sudden reduction in bone mass, which is thought to lead to osteoporosis.

□ Hardening of the Arteries
Hardening of the arteries, or atherosclerosis, is a disease where the walls of blood vessels grow harder and narrower. The fundamental cause is an excess of bad cholesterol (LDL Cholesterol – a lipoprotein which transports cholesterol to cells and organs) in the blood. Atherosclerosis is the main culprit in the onset of angina pectoris and myocardial infarction when it spreads to blood vessels in the heart, or stroke when it spreads to blood vessels in the brain. Atherosclerosis can also lead to high-blood pressure by narrowing the blood vessels.
Estrogen not only has the effect of reducing bad cholesterol in the blood stream, but it also increases good cholesterol (HDL Cholesterol – a lipoprotein which collects excess cholesterol from organs and cells). Estrogen also works to increase the elasticity of blood vessels. This is why atherosclerosis is a common menopausal and post-menopausal disease when estrogen levels drop. Indeed, atherosclerosis is reported more often in women after the menopause.

□ Atrophic Vaginitis

Atrophic vaginitis is a degenerative disorder seen in post-menopausal women. It is an inflammation which arises due to the reduction of estrogen, which works to strengthen the epidermal cells of the vagina's mucous membrane and prevent multiplication of bacteria. This lack of estrogen causes the vagina's mucous membrane to thin and become more sensitive to external stimulation. It is often associated with a bloody and smelly discharge.
Deficiency of estrogen after the menopause can also lead to vaginal dryness and painful intercourse. Essentially, estrogen enables sperm to enter the uterus at the time of ovulation by increasing mucous secretion from the uterine cervix.

Prevention and Treatment of Osteoporosis, Atherosclerosis, and Atrophic Vaginitis

Clearly, promoting the secretion of estrogen is key to the prevention and treatment of diseases like osteoporosis, atherosclerosis, and atrophic vaginitis, which are caused largely by a lack of estrogen.
This is why we look to placenta. Here too, the placenta's "Secretion Regulatory Function" provides an effective treatment. The Secretion Regulatory Function regulates the balance of hormones, restricting hormone secretion when there is excess secretion and promoting it when there is insufficient hormone secretion.
Using placenta to treat the sudden drop in estrogen after the menopause promotes hormone secretion, allowing a gentler decline and alleviating the effects on the body. This is why the placenta shows such a broad effectiveness in treating menopausal disorders. We also know that functions such as the "Active Oxygen Removal Function" and "Tissue Repair Function" provide even more effectiveness against atherosclerosis.
Below is a simplified explanation of how atherosclerosis develops.
(1) Bad cholesterol which has penetrated the lining of blood vessels is oxidised by active oxygen.
(2) Macrophages of immuno-competent cells arrive, identify the cholesterol as a foreign body, and ingest them. This causes them to swell up and transform into foam cells.
(3) The number of foam cells increases, raising the membrane of the blood vessel wall and eventually rupturing it. The remains of cholesterol and foam cells mix together like a syrup, and this athero (or deposit) hardens. As a result the blood vessel loses elasticity, hardens, and atherosclerosis develops.

At its root, atherosclerosis is the work of bad cholesterol and active oxygen. Recently, the phrase "active oxygen" has appeared again and again in health magazines and books, but in fact it plays a large role in the onset of atherosclerosis and in around 90% of modern diseases. So what exactly is active oxygen?
Our bodies are composed of six trillion cells, and each one creates energy through a chemical reaction using oxygen, glucose and fat. However, when this occurs, around 2 to 3% of the oxygen forms into an unstable state, and is transformed into excess active oxygen.
The process of oxygen becoming an unstable molecule is a complex physical phenomenon and there are some difficult to understand aspects to active oxygen. If you were to look it up in a physics textbook you might find the following explanation: "All materials (including oxygen) are made from molecules and those molecules are composed of atoms. Normally, electrons spin around the nucleus of atoms in pairs, producing a stable molecular state. However, if a molecule is stimulated and electrons spin individually, it collapses into an unstable state. In order to become stable again the molecule has to capture an electron from another molecule, and this makes it very reactive." Therefore, if there is an excess of energy, a small proportion of oxygen molecules will have single, unpaired electrons, and transform into "active oxygen."
This active oxygen is a big problem because it has to react with other materials inside the body in order to retain its stable state. This reaction is called "oxidation".
Nevertheless, active oxygen is not an unhealthy particle. It has the beneficial effect of counteracting viruses and toxins which invade the body. However, if an excess of active oxygen is produced, rather than being beneficial, it rages around the body damaging (oxidising) surrounding cells and organs due to its strong oxidising properties.

You probably know the oxidising effect of airborne oxygen from when you leave an iron nail outside and it turns a red rusty colour, or when you leave part of an apple is out and it turns brown. Inside the body, cells and organs can be similarly damaged by active oxygen.
Our bodies produce antioxidant enzymes, which are best described as cleaners which remove excess active oxygen produced in the body. Typical antioxidant enzymes are SOD (Super Oxide Dismutase) or Catalase, however from around the age of 40 the production of these enzymes gradually declines. This decline in antioxidant enzyme production is the trigger for the increased variety of diseases in middle and old age.
Going back to our earlier discussion, the culprits for the onset of atherosclerosis were bad cholesterol and active oxygen. Placenta not only suppresses bad cholesterol in the blood by improving estrogen secretion through its "Secretion Regulatory Function", but also promotes the removal of active oxygen through its "Active Oxygen Removal Function". In other words it works to remove both of the main causes of atherosclerosis.
Also, atherosclerosis begins when bad cholesterol penetrates weakened blood vessel walls, so the placenta's "Tissue Repair Function" also plays a vital role in the prevention of atherosclerosis by promoting the repair of weakened or damaged tissue.

Week Two

		1st Month	2nd Month
A	T-CHO	255	239
S27	HDL-Cho	55	46
(49yrs)	Neutral Fats	216	267

		1st Month	2nd Month
B	T-CHO	263	250
S20	HDL-Cho	62	71
(56yrs)	Neutral Fats	181	128

		1st Month	2nd Month
C	T-CHO	254	221
S17	HDL-Cho	83	73
(59yrs)	Neutral Fats	136	315

		1st Month	2nd Month
D	T-CHO	290	265
S20	HDL-Cho	45	58
(56yrs)	Neutral Fats	718	228

		1st Month	2nd Month
E	T-CHO	256	251
S18	HDL-Cho	78	72
(60yrs)	Neutral Fats	76	119

T-CHO = Total Cholesterol
HDL-Cho = Good Cholesterol

Week One

		1st Month	2nd Month
F	T-CHO	303	268
S19	HDL-Cho	54	49
(59yrs)	Neutral Fats	290	180

		1st Month	2nd Month
G	T-CHO	234	214
S29	HDL-Cho	81	78
(47yrs)	Neutral Fats	314	86

		1st Month	2nd Month
H	T-CHO	256	209
S27	HDL-Cho	103	87
(49yrs)	Neutral Fats	118	95

		1st Month	2nd Month
I	T-CHO	290	243
S23	HDL-Cho	95	102
(53yrs)	Neutral Fats	55	91

		1st Month	2nd Month
J	T-CHO	234	213
S14	HDL-Cho	67	68
(62yrs)	Neutral Fats	144	110

		1st Month	2nd Month
K	T-CHO	290	243
S23	HDL-Cho	95	102
(53yrs)	Neutral Fats	55	91

Table 2-12 – The Menopause and Hyperlipidemia

In my clinic, there are often cases of patients with a combination of menopausal disorders and hyperlipidemia (excessive fats such as bad cholesterol in the blood). We wanted to find out what the values for overall cholesterol, good cholesterol, and neutral fats would be after one or two weeks of placenta injections. [Table 2-12] shows the results. The key thing here is that compared to the reduction in overall cholesterol, good cholesterol tends not to fall but instead is often seen to rise. It is further proof of placenta's beneficial effect that we see such an improvement over such a short time scale.
Another process at work here is the placenta's "growth factors", specifically the "Epidermal Growth Factor", which promotes growth and rejuvenation of the epidermal cells in the vaginal membrane, thereby significantly alleviating atrophic vaginitis and painful intercourse.

Prevention and Treatment of Breast Cancer and Uterine Cancer

Breast and uterine cancer are cancers which particularly affect women around the time of the menopause.
The two main types of uterine cancer are cervical cancer and endometrial cancer. Cervical cancer affects the cervical area and is most common in women in their 30s and 40s, while endometrial cancer affects the lining of the uterus and is most common in post-menopausal women in their 50s or 60s. Until recently cervical cancer was overwhelmingly more common, however rates of endometrial cancer are increasing, and the proportion is now around 70% cervical cancer to 30% endometrial cancer.
Those more at risk to endometrial cancer include women in their 50s and 60s, those who had a late first birth, those who have never given birth, obese people, and smokers.
It is thought that those in their 50s and 60s are more at risk to endometrial cancer due to the imbalance of female hormones. Specifically, in the 2 to 3 years after the menopause, the functions of the ovaries decline and ovulation does not occur, but while progesterone production ceases, production of estrogen is merely reduced. This means there is no progesterone to counter the function of the estrogen, and this unregulated estrogen makes it easier for endometrial cancer to develop.
For breast cancer, however, those at greater risk include women over 40, those whose family has a history of breast cancer, those who had a late first birth, those who have never given birth, obese people, and smokers; a demographic which overlaps considerably with those at risk of endometrial cancer. While the causes of cervical cancer are not yet well understood, there is a clear and substantial influence from estrogen. The reason obese people are at greater risk of endometrial and breast cancer is the deep relationship between obesity and estrogen.
After the age of 40 the phenomenon of "middle-aged spread" leads to an increase in obesity. It is often claimed to be due to the basal metabolic rate slowing as well as many years of excessive eating and lack of exercise. However in truth, the problem here is that estrogen is created in the subcutaneous fat. The male hormone androgen is converted into estrogen in the subcutaneous fat, and secreted. This estrogen is thought to play a significant role in breast and endometrial cancers.
Similarly, the reason those who first gave birth at a late age and those who have never given birth have a higher risk is because they have had longer exposure to estrogen. When pregnant the secretion of female hormones ceases, so their influence is avoided. This is why the risk of cancer is lower in women who have given birth many times.
There are many reasons that smoking is a risk factor for all cancers. Primarily, it is a source of large volumes of active oxygen. It reacts with and damages oncogenes (cancer-causing genes), and soon the whole cell is oxidised, increasing the risk of it becoming cancerous.
Placenta is a very effective treatment for endometrial and breast cancer. The compound effect of the placenta's "Secretion Regulatory Function," "Anti-mutagen Function," "Anti-tumour Function," "Gene Repair Function," and "Active Oxygen Removal Function," demonstrates a powerful effect against cancer. Also, the placenta's various growth factors promote rejuvenation of healthy cells and organs.

By being aware of what kind of changes take place in the body and mind when the production of female hormones suddenly reduces at the time of the menopause, one is better equipped to appropriately handle

menopausal disorders and common diseases in that stage of life. Of the choices available at this time, I'm sure you'll agree that placenta and Kampo remedies are powerful allies.

Section 3

Effective Treatment of Pre-Menopausal Disorders: Menstrual Irregularity, Chills, Stiff Shoulders, Sleeplessness, Constipation, Anaemia, etc.

What Are Pre-Menopausal Disorders

As a clinician, I diagnose patients on a daily basis, and one recent trend which has come to light is the alarming rise in cases with symptoms which resemble those at the time of the menopause, but are experienced by young women in their 20s or 30s many years earlier. Year on year there is a sharp rise in young women suffering with a vague malaise, such as irregular menstruation, painful menstruation, constipation, headaches, sleeplessness, stiff shoulders, dizziness, and anaemia.

People are always advised to consult a doctor rather than suffer such symptoms in silence. Because vague symptoms like irregular menstruation and chills don't impact directly on your life, we often fail to recognise them as illnesses, despite the suffering they cause. It may be no exaggeration to say this is becoming a social phenomenon affecting a large number of women.

This vague malaise can be described as being "similar to menopausal disorders", and it is clear that it is a special case of the general malaise which arises in women in their 40s or 50s around the time of the menopause, where an imbalance of the nervous system is triggered by a reduction in female hormones. Of course, young women in their 20s and 30s are generally not affected by the changes in hormones accompanying the menopause. So, what exactly is the cause of these "quasi menopausal disorders"?

While we can't say for sure, there do seem to be a number of contributing factors. The first thing which comes up is stress. Second is diet and extreme eating habits, and the third factor is a disturbed body clock caused by a hectic lifestyle. I myself have come to the strong opinion, based on the results of my treatment, that placenta is extremely effective for these bodily irregularities, or "pre-menopausal disorders". There are many examples of young women in their 20s and 30s who come for placenta injections for beauty reasons, but who are then pleased with the unexpected results of the treatment, such as their irregular menstruation being cured or their stiff shoulders or constipation disappearing. This is why I say "placenta has very few side-effects, except for the good ones which occur again and again".

Koichi Hieda, the son of the inventor of the "Laennec" placenta injection, Prof. Kentaro Hieda, had this story to tell about his time at the helm of the Laennec Company.

"Around 30 years ago I received a telephone call from the mother of a young unmarried lady who worked at our offices. She asked "For a long time she has suffered with menstrual pain every month, but lately she hasn't felt any pain. There's no chance that she might be pregnant, so do you have any idea what might have happened?" The truth of the situation was that the young lady had heard of the wonderful properties of Laennec, had been taking the injections, and her menstrual pain had disappeared."

Below is a more detailed description of how pre-menopausal disorders arise, and how placenta is effective for their treatment.

The Link between Pre-Menopausal Disorders and Stress

There is an intimate relationship between the mind and the body. There was a famous clinical report on this subject from a Dr. Wolf, which clarified the matter using observations of the stomach lining.

A young boy had burned and blocked his oesophagus when drinking some very hot soup. As a result the boy was unable to eat, and in the end a hole had to be made in his abdomen and chewed food put directly inside his stomach. Each time the doctor put food inside, he made an observation of the inside of the boy's stomach, and soon he noticed something interesting. When the boy was in a good mood the stomach lining was pink, whereas when he was down the stomach lining became a shade of blue due to unhealthy blood. Finally when the boy was angry, blood oozed all over the stomach lining making it red. Your state of mind influences the qualities of your blood, which manifests in the colour of your stomach lining. From this series of responses, Wolf surmised that the mind and the body were intimately linked.

So, by what mechanism does your state of mind influence blood circulation? All changes in human emotions are first captured by the cerebral limbic system [Figure 3-1], and this stimulus is transmitted to the hypothalamus. The hypothalamus is the command centre for the hormonal and the nervous systems, and this centre reacts to stimuli from the cerebral limbic system. The nervous system is composed of

sympathetic and parasympathetic nerves, and both are present in all organs of the body, providing mutually opposing functions to those organs. The sympathetic nerves are responsible for "activity" and "stimulation", whereas the parasympathetic nerves are responsible for "resting" and "stillness." Using the combination of both, the body can be regulated.

[Labels: clockwise from top-left] Cerebral Limbic System, Cerebral Cortex, Cerebellum
Figure 3-1

Therefore, to apply this to our previous example, when the boy was angry this was captured by the cerebral limbic system, which stimulated the sympathetic nerves into action, constricting blood vessels, bursting capillaries and causing blood to ooze out of the stomach lining.
After a while when the boy calmed down, the parasympathetic nerves act to widen blood vessels returning them to normal, which allows smooth circulation and causes the stomach lining to return to a pink colour.
Furthermore, when the boy had hardly slept through worrying about the results of his medical tests, this worry leaves the sympathetic nervous system free to stimulate the body through the night and into the following day.
Let's find out how unpleasant stimuli like anger, fear, anxiety, worry or depression, which are all stress stimuli, affect the body. First, the action of the sympathetic nerves kicks in, throwing the sympathetic and parasympathetic nervous systems out of balance and causing an imbalanced nervous system. An imbalanced nervous system is seen in symptoms such as chills, sleeplessness, dizziness, stiff shoulders, headaches, swelling, constipation, diarrhoea, depression, anaemia, and numb limbs. Many of these are the same symptoms as the pre-menopausal disorders discussed at the start of this section. Therefore, we can form the following flow of thinking regarding the link between stress and pre-menopausal disorders: "body is stressed → disorder in nervous system → imbalanced nervous system = pre-menopausal disorder".

Suppression of Emotions and Desires and an Out-of-Balance Nervous System

The suppression of emotions and desires is also known to cause imbalance between the sympathetic and parasympathetic nervous systems.
First of all you should keep in mind that the cerebral limbic system governs instinctive thoughts like hunger, sexual desire and sleepiness, as well as emotions, while the cerebral cortex handles mental activities like thought, decisions and reason. The hypothalamus then controls both the cerebral limbic system and the cerebral cortex.
So, for example, if the cerebral limbic system sends an "anger" emotion, but the cerebral cortex sends a "don't be angry" decision, the hypothalamus is unsure whether to activate the sympathetic nerves, and in the end the nervous system is confused. Similarly, if the cerebral limbic system sends a "hunger" desire, but the cerebral cortex sends the thought "don't eat now," the hypothalamus will again become confused, leading to an imbalanced nervous system.
If emotions and desires are repeatedly suppressed in this way, the nervous system will be in a constant state of imbalance.
Therefore, when you are busy with work and habitually suppress the desire for food or the bathroom, this can lead to no feeling of hunger even when your body is hungry, resulting in anorexia or constipation. Also, if you excessively hold in your emotions and ignore your surroundings, the hypothalamus can no longer tell which emotions are being experienced, allowing mental depression to develop.
When I listen to the stories of young women who suffer from pre-menopausal disorders, it is very common for emotions and desires to be habitually suppressed. Avoiding the unreasonable suppression of natural desires and trying to represent ones true emotions is of vital importance in keeping your body free from an abnormal nervous system.

Trend towards Those Susceptible to Stress

The biggest difficulty in understanding "stress" is that the way we feel stress differs from person to person. Even in the same situation and circumstances, there will be those who feel stressed and those who don't. The causes of this are differences in people's predisposition and character, as well as their ability to counter stress. Even the same person might handle stress differently depending on their physical conditions and the circumstances.
Generally, the following are indicators of a person who is susceptible to stress.

- People who have a weak regulatory function of the nervous system by nature.
- People with low bodily resistance to stress.
- People who tend to rely on others.
- People who find personal relations difficult.
- People who can't easily show their emotions.
- People who can't refuse a request.
- People who pay too much attention to what others think.
- Methodical people.
- Nervous or fussy people.
- Stubborn or unaccommodating people.
- People who are quick to obey those with titles or authority.
- Tense people.
- People who find it hard to change their mood.

We often hear that today's youth are particularly susceptible to stress. This points to factors like excessive care during childhood, a lack of independent thought, a strong tendency to rely on others, an inability to make good personal relations, an inability to show real emotions, and a weakness to authority.
It is possible that the numbers of people susceptible to stress are increasing due to children's tendency to grow up quickly without fully experiencing their childhood, with all the associated studying for exams, peer pressure, arguments and reconciliations with brothers, sisters, and friends, and mental discipline.
Of course, modern society is stressful. It's hard to even count the causes of stress, with complicated relationships, packed schedules, work targets, a job you just don't want to do, information overload, love and marriage problems, discord with parents, balancing work and family, disgruntled kids and husbands, the mother-in-law, and worries for the future. These sources of stress all add up even for women in their 20s and life can sometimes seem a constant struggle against this pressure. It is for these reasons that without you knowing it, or perhaps suddenly when it all gets too much, the balance of the sympathetic and parasympathetic nerves breaks down, and your body suffers an imbalanced nervous system.
As has been mentioned, placenta demonstrates great success at regulating the balance of sympathetic and parasympathetic nerves. Specific examples of placenta's power in treating these symptoms of the nervous system will be discussed shortly.

The Link between Pre-Menopausal Disorders and Diet

Along with stress, the other of the two main contributing factors to pre-menopausal disorders is a bad diet. Essentially, what we eat governs how we live. Therefore, an easily assimilated and balanced variety of nutrition is vital to maintaining good health. As well as proteins, fats and carbohydrates, we also need vitamins and minerals if we are to maintain a healthy brain and nervous system.

□ Nutrition for a Healthy Brain and Nervous System

- Proteins
  Proteins are the body's raw material for building organs, muscles, nerves, blood and skin, protein acts as the body's energy source. They also improve the functions of the brain and nerves, reduce stress, and promote hormone secretion, as well as being the building block for hormones.
- Fats
  Fats are also a raw material for cell membranes and blood, and act as a source of energy. They are also good at absorbing lipid-soluble vitamins such as Vitamin A, D, and E.
- Carbohydrates
  Carbohydrates form the structural components of the body and are an efficient source of energy. They are the sole energy source for the brain and nervous system, and if they are in short supply the brain will drop in functionality.
- Vitamins
  Vitamins help to smooth the functions of the three main nutrient groups, maintain the normal function of the brain and nervous system, and boost the body's resistance to stress.
    - Vitamin A – Activates the nervous system. Fights stress.
    - Vitamin B_1 – Regularises and activates the brain and nervous system.
    - Vitamin B_6 – Keeps the nervous system running normally.
    - Vitamin B_{12} – Keeps the nervous system running normally.
    - Vitamin C – Fights stress. Prevents brain cells from aging.
    - Vitamin D – Helps the function of calcium which is essential to the nervous system.
    - Vitamin E – Stabilises the autonomic nervous system. Regulates hormone balance. Prevents brain cells from aging.
- Minerals
  Essential nutrients which maintain and regulate the body's functions.
    - Building blocks for hormones such as magnesium, iron, copper, iodine, zinc, manganese, and cobalt.
    - Maintain functions of the nervous system such as calcium, sodium, and potassium.

It is because these nutrients combine and act in unison that the Japanese government has set a guideline of "a daily target intake of 30 items". Therefore, when you deviate from these nutrients it isn't just your body but the functions of your brain and nervous system that feel the negative effects of hormone secretion. Generally speaking, people who rely on eating out and on processed foods will have a deficiency in vitamins and minerals, leaving them with a poor resistance to stress, and susceptible to an imbalanced nervous system.
In addition many young women want a slender figure, and there are many who work hard to keep to a diet. But all too often balanced nutrition is ignored by consistently controlling calorie intake, and taken to extremes can end in malnutrition. This lifestyle in women in their 20s and 30s which involves eating out, eating processed food and over-dieting, can easily lead to a chaotic nervous system, imbalanced nervous system, or malnutrition. It is also thought to be a factor in causing absence of menstruation.

Diet as the Cause of Irregular or Non Menstruation

Because impossible diets in themselves are very stressful, the hypothalamus is sent into chaos causing problems for hormone circulation. As a result, a hitherto regular menstrual cycle can become distorted leading to irregular menstruation and finally even an absence of menstruation. If an absence of menstruation persists, because the uterus and ovaries are not functioning they can atrophy and fall into a state similar to that in old age.
If levels of fat are drastically reduced due to dieting this will also reduce the amounts of estrogen. A fall in estrogen can be a trigger for irregular or absence of menstruation, which in turn inhibits estrogen's

functions of preventing calcium leak and suppressing build up of cholesterol, leading to diseases like osteoporosis or hyperlipidemia.
To prevent diseases caused by a chaotic lifestyle a nutritionally balanced diet should be observed and impossible diets should be dropped. However, the role of placenta in normalising the balance of the hormone and nervous systems is also a powerful tool in treating an imbalanced nervous system and other diseases. The placenta itself is also very nutritionally balanced with proteins, amino acids (the building blocks of proteins), fats, carbohydrates, and various vitamins and minerals, meaning great improvements can be made with placenta treatment alone.

Pre-Menopausal Disorders and Body Clock Problems

Another common cause of bad physical health is a disturbed body clock caused by a hectic life involving staying up and waking up late, where eyes sting late into the night and the daytime feels hazy and distant.
For more than five million years, mankind has lived waking up with the sunrise and resting with the sunset. This natural rhythm is a part of our bodies. It primes our body clock and our nervous system works according to this cycle. During the day the sympathetic nerves are the focus, enabling activity and stimulation, whereas the night is the time for the parasympathetic nerves to enable rest and relaxation.
However, staying up late is becoming routine particularly for young people, making it difficult for the body to follow a natural rhythm. This is another situation where the sympathetic and parasympathetic nerves fall out of balance leading to an imbalanced nervous system. People with an imbalanced nervous system brought on by this problem can try to reset their body clock by sleeping and rising early, but they might also try using placenta. As we know, placenta has the power to heal conditions such as these via its Nervous System Regulatory Function, Secretion Regulatory Function, and Fatigue Recovery Function.

Illnesses Linked to Pre-Menopausal Disorders

While we don't yet know exactly why there is an increase in young women with an imbalanced nervous system, it is thought to be linked to "stress", "an imbalanced diet", and "a chaotic body clock", and the reasons for these are as mentioned earlier. When two or all three of these factors occur together this raises the chances of contracting disease all the more.
By way of explanation, let's look at a range of pre-menopausal disorders commonly experienced by women in their 20s and 30s in turn.

□ Chills
This is a disorder whereby the limbs, back or hips become abnormally cold. The limbs and hips are clearly areas where blood flow can easily become stagnant, but more than that a problematic nervous or hormone system can hinder control of the constriction and widening of blood vessels, restricting flow in peripheral vessels and making those areas cold.
In many cases, young women have a high level of stress from work or relationships coupled with poor nutrition, which causes a strong stimulus in the sympathetic nerves, constricting blood vessels and causing chills due to bad circulation.
To combat chills as a symptom it is important to improve circulation using massage, bathing, moderate exercise, and warm underwear. To combat the causes of chills you should eliminate any stress and eat a balanced diet. Placenta can help alleviate chills through its Circulation Function, Basal Metabolism Function, Nervous System Regulatory Function, and Secretion Regulatory Function.

□ Stiff Neck or Shoulders
Put simply, stiffness is a congestion of blood in muscles. This happens due to stagnant blood flow, and is also a result of circulatory problems.

Things like spending many hours using a computer or games console lead to prolonged tension on the muscles, and this overexertion causes psychological stress. Mental stress activates the sympathetic nerves, constricting the peripheral blood vessels in the muscles and causing blood congestion.
The major concern about shoulder and neck stiffness is that it can reduce blood circulation to the brain making the head feel heavy and triggering headaches or giddiness. This re-activates the sympathetic nerves, adding to the stiffness and making it a difficult symptom to shake.
The first step in curing this stiffness is to cancel out the source of the stress, then massage, bathing and moderate exercise help to improve blood flow. However it is vital not to activate sympathetic nerves while bathing or exercising, so hot baths and vigorous exercise should be avoided. The Nervous System Regulatory Function, Circulation Function, and Fatigue Recovery Function of placenta demonstrate beneficial effects for stiffness.

□ Sleeplessness
During “sleep” the sympathetic nerves are associated with the stimulation centre of the brain, while the parasympathetic nerves are associated with the sleep centre. Therefore, if you are troubled with worry, anxiety or anger late into the night or stay up too late watching television for example, the sympathetic nerves keep priority and sleepiness is brushed to one side. Mental stress and body clock problems are the main culprits for sleeplessness.
A common scenario is to drift off into a light sleep while watching television, but this is thought to be because the bright screen forces the pupils contract, making it easy for the parasympathetic nerves to take over. You might assume that reading a book before bed has a similar effect. However, the white pages actually stimulate sympathetic nerves and have the opposite effect. You may also have heard that it is good to take a slow, lukewarm bath before bed and a quick, hot shower after waking. This helps the parasympathetic nerves act before bed and the sympathetic nerves act after waking up. Similarly, a good way to fight psychological stress before bed is to think “sleeping comes first, and all my problems can wait until tomorrow”, thus consciously changing the priority from sympathetic to parasympathetic nerves. If you prepare yourself for sleep by doing things which activate parasympathetic nerves, this will help you to get to sleep smoothly.
Also, if you activate your sympathetic nerves during the day by being very active, you will find that your activity level automatically decreases at night, parasympathetic nerves take over, and as well as getting back a regular biological rhythm your sleep will be peaceful. For example, if your body temperature is raised due to daytime activities, it will gradually drop just before bed making it easy to fall asleep.
By using this method and adding in the Nervous System Regulatory Function and Secretion Regulatory Function of placenta you can make a big difference to a sleeplessness disorder. In practise, many patients say “I sleep deeply now. Before I would wake up with every little sound but after just one Placenta Extract injection I can sleep soundly.” and “I wake up totally refreshed.” This is the result of a balanced sympathetic and parasympathetic nervous system.

□ Headaches
Headaches affecting one or both sides of the head are a result of the strong stimulation of the sympathetic nerves due to psychological stress, which constricts the blood vessels inside the cranium. Muscle-contraction headaches which are often associated with pain and stiffness from the back of the head down to the neck muscles are also caused by the same stimulation of the sympathetic nerves due to psychological stress, however in this case it occurs because the blood vessels from the back of the head down to the neck are constricted, reducing circulation.
Placenta’s Tranquilising Function, Nervous System Regulatory Function, and Circulation Function are useful tools for this disorder.

□ Dizziness
Orthostatic syndrome and orthostatic hypotension are conditions consisting of dizziness, giddiness or headaches caused by a restriction of blood flow in the brain, and occur, for example when standing up too

quickly. Normally, when standing up or sitting down there is no loss of blood pressure in the brain due to the regulatory function of the nervous system. But stress can throw the nervous system out of balance, reducing its abilities and reducing the amount of blood reaching the brain. This causes the symptoms of dizziness, giddiness and headaches.
This problem can also be treated with placenta, through its Nervous System Regulatory Function and Circulation Function.

□ Constipation and Diarrhoea
Psychological stress and an imbalanced nervous system are a major cause of constipation in women. If the sympathetic nerves are strongly stimulated the functions of the bowels are suppressed, making excretion difficult and causing constipation. Alternatively, when the parasympathetic nerves are strongly stimulated, the intestinal tract is over-stimulated and excretion takes place before moisture has been sufficiently collected, causing diarrhoea.
Another disease which can arise from irritation of the bowels due to stress or overwork is irritable bowel syndrome. The symptoms are alternating constipation and diarrhoea. This disease doesn't arise due to damage to the nervous system, but due to an over-stimulation of the bowels in reaction to stress or overwork. This is why you shouldn't use constipation medicine as this makes the bowels work harder, but rather medicine which calms tension in the intestinal tract. It's a good policy to first eliminate any nervous tension and anxiety which can cause stress.
Additionally, if you repeatedly consciously stop yourself from going to the toilet, soon the feeling of needing to go to the toilet will cease to occur even if there are faeces in the rectum, which can lead to chronic constipation. There are many causes of constipation in women, so care is advised.
Another related issue is that what you eat also determines how smoothly your digestive system works. Thus, bad diet is a problem here too. The best option is always a high-fibre, nutritionally-balanced diet.
Of course the Nervous System Regulatory Function of the placenta will be of use here, but you can also expect its general regulatory functions to alleviate the tension in the bowels brought on by irritable bowel syndrome.

□ Anaemia
There are many types of anaemia, but the type at work in 95% of cases in women is iron deficiency anaemia. There is a substance called haemoglobin inside red blood cells which is made from proteins containing iron, and this transports oxygen to every cell in the body. If there is insufficient iron then haemoglobin can't be produced in large enough quantities and the amount stored within red blood cells falls. This means cells and organs become oxygen-deficient, reducing their functionality and causing symptoms such as sluggishness, breathlessness and palpitations.
To combat anaemia it is essential to stop impossible diets and extreme eating habits and replenish the lost iron in the body. The placenta itself contains a great deal of iron, and its Anaemia Improvement Function and Blood Production Function make it an effective treatment.

□ Abdominal Pain
A well-known disease which can be triggered by stress is gastric ulcers. An ulcer is a healing wound on a mucous membrane. Gastric ulcers can be acute or chronic, and whereas an acute gastric ulcer is a light inflammation of the stomach lining, a chronic gastric ulcer is a deep, hollowed-out ulcer.
If the sympathetic nerves are stimulated as a result of temporary stress such as after an accident and the blood vessels immediately below the mucous membrane are constricted, the environment inside the stomach worsens. This puts the secretion of stomach juices into disorder and particularly when the stomach is empty it can begin to digest itself. This is one of the main causes of acute gastric ulcers.
If the body is continually under stress, even the blood vessels underneath the muscles below the mucous membrane are constricted. This stops any blood reaching that area and a localised area of the stomach dies, allowing stomach acid (a strong hydrochloric acid) to enter and hollow out a deep chronic gastric ulcer.

Placenta Extract injections approved by the Japanese government are “Melsmon” for menopausal disorders and failed lactation, and “Laennec” for liver disease. However many years ago there were injections for gastric ulcers available called “PLP” and “Sauer Placenta”. Both ceased trading due to low profits, but they used the same Placenta Extract as today’s products, meaning “Melsmon” and “Laennec” can be used to treat gastric ulcers.
Another common abdominal problem is heartburn. The chain of events leading to heartburn begins when food is eaten and the stomach receives a hormone called Gastrin. Gastrin causes a strong hydrochloric acid to be produced which breaks down the food, and it also seals off the oesophagus preventing back-flow. If this last function fails for some reason stomach acid can flow up the oesophagus causing heartburn.
Nausea, however, is triggered by a cessation of activity in the stomach caused by sympathetic nerves activated due to psychological stress. If the stomach isn’t functioning and food is inside it, the body has a reflex response to eject the food, causing the sense of nausea.
Both heartburn and nausea can be effectively treated with placenta, due to its Nervous System Regulatory Function.

□ Premenstrual Tension
Symptoms like headaches, irritability, mild depression, breast pain, abdominal pain, constipation and swelling which occur over the period three to ten days prior to menstruation are called premenstrual tension, and can be recognised because they disappear once menstruation begins.
The cause is not fully understood, but it is clear that this period from three to ten days prior to menstruation is the same period over which the hormone progesterone is secreted, making it likely that the functions of this female hormone are responsible for the symptoms. Also, people who are susceptible to stress, such as those who are often nervous or tense, tend to be more susceptible than others.
Normal symptomatic treatments for premenstrual tension include painkillers and tranquilisers, but placenta can also be used as a treatment courtesy of its Secretion Regulatory Function, thus removing the cause of the symptoms. Other good ways to ease premenstrual tension include listening to calming music, light exercise, light bathing, foot baths and generally spending time relaxing. When you relax you activate your parasympathetic nerves and their tips secrete a neurotransmitter called acetylcholine which suppresses activity, calming the heart rate and giving a sense of contentment (on the other hand, when you are stressed you activate your sympathetic nerves and their tips secrete a neurotransmitter called noradrenalin which promotes activity). This boosts your body’s psychological resistance, so even if you do experience stress your body can handle it better. Relaxation, being the opposite of stress, is the best “elixir” to fight off stress.

□ Menstrual Pain
All women have a different experience of menstruation, and this includes menstrual pain like headaches, abdominal pain and hip pain. However, if it impacts on your life you are advised to consult a doctor and obtain treatment. Menstrual pain arises because local production of hormones called prostaglandins increases and these promote constriction of the uterus, and this constriction increases at the time of discharge, causing pain. Women who haven’t given birth in particular will have a narrow uterus making it difficult for discharge to flow, causing congestion and pain.
Placenta is remarkably powerful in the treatment of menstrual pain, combining both the Secretion Regulatory Function and the Circulation Function.

A number of the premenopausal disorders described above can also be caused by other diseases, for example, anaemia which may be caused by increased blood loss due to uterine fibroids or endometriosis. Serious diseases such as these may be the hidden cause of some premenopausal disorders. This is why self-diagnosis of such symptoms is not recommended. The opinion of a doctor should always be sought to find out whether the cause is a disease, or a disorder of the nervous system or lifestyle. The mind and the

body are intimately linked, meaning excessive worry, anxiety or pain can lead to a degradation of the bodily condition and disease.

Placenta is Effective for Gynaecological Illnesses

Placenta has been shown to be very effective in the treatment of gynaecological illnesses such as uterine fibroids, endometriosis and mastitis in women in their 20s and 30s. Below is a description of these diseases and how the placenta can be used in their treatment.

□ Uterine Fibroids
The uterus is lined with a mucous membrane (endometrium) and below that is a muscle layer made from a substance called smooth muscle. Fibroids are benign tumours formed from abnormal cell growth in this uterine muscle layer. Fibroids are remarkably common with one in every five adult women contracting the disease. Symptoms are excessive menstruation, irregular bleeding, intestinal pain and anaemia, however in many cases the symptoms go unnoticed. Fibroids which have developed to the size of a fist will generally require surgery.
The cause is not completely understood, but it is known that estrogen plays a central role. The development of uterine fibroids is incited by the function of estrogen, and they have been known to shrink after the menopause when estrogen levels are reduced.
The combination of the Secretion Regulatory Function, Anaemia Improvement Function, and Blood Production Function make placenta a good treatment, and are thought to suppress the development of uterine fibroids as well as alleviate the symptoms.

□ Endometriosis
Endometriosis is increasingly common in young women in their 20s and 30s, and has recently been attracting a great deal of concern as it can lead to infertility.
The tissue which forms the endometrium appears in places outside the uterus such as the ovaries and in the uterine muscle layer. These areas are also affected by hormones in a similar way to the endometrium during menstruation. This growth and bleeding is called endometriosis. Normally the lining of the uterus is expelled from the body along with blood when it detaches, however there is no channel out of the body from these other areas, so the out-flowing blood amasses into a lump and can occasionally obstruct the ovaries or fallopian tubes.
Symptoms include abdominal pain, menstrual pain and painful intercourse. Again, the causes of this disease are not fully understood, however repeated menstruation without pregnancy from first menstruation is thought to play a role. Also, after the menopause endometriosis tends to recede. As for the effectiveness of placenta, the Secretion Regulatory Function helps in the treatment, and it has been successful in suppressing the advancement of endometriosis.

□ Mastitis and Hyperprolactinaemia
Mastitis is a swelling in the mammary gland but unlike breast cancer, it is benign.
The mammary glands are formed from lobules which secrete milk and ducts which transport the milk to the nipples. They periodically change according to signals from female hormones (estrogen and progesterone). Estrogen affects the ducts and progesterone affects the lobules, and these two hormones are kept in balance according to instructions from the pituitary gland. When this balance is lost and estrogen is over-produced, the mammary glands become abnormal, causing mastitis.
As well as producing a swelling, mastitis can cause abnormal nipple discharge, which is a milk-like discharge from the nipple. Patients are often first surprised, thinking “Why am I producing milk even though I haven’t given birth”, but these cases are almost always symptoms of mastitis.
As has been discussed, placenta is very good at creating a hormone balance with its Secretion Regulatory Function, and it also shows effectiveness in preventing and treating mastitis.

Another common cause of abnormal lactation is a condition called “hyperprolactinaemia”, which can cause lactation in young women who have never given birth. Normally when a woman gives birth, a lactation hormone called prolactin is secreted in large quantities. Hyperprolactinaemia is caused by the secretion of prolactin in a woman who has not given birth.

It is worth noting that the placenta injection “Melsmon” has been approved by the Japanese government for the treatment of failed lactation. When mothers who are unable to give milk receive this injection, it activates the lactation hormone, *promoting lactation*. However, when sufferers of hyperprolactinaemia receive this injection, it activates another lactation hormone, and this time it *suppresses lactation*.

Ordinarily, medicines act either in one direction or the other, but placenta treatments specialise in this balancing, regulatory function. Perhaps this is why placenta has so few side-effects. Also, although both mastitis and failed lactation are related to lactation, the hormone which controls each of them is different. Nevertheless, placenta has an overall regulatory effect on the secretion system, making it effective for both ailments. In other words, placenta adjusts to the situation, whether suppression of progesterone in the case of mastitis or promotion of prolactin in the case of failed lactation.