TREATING INFERTILITY WITH REFLEXOLOGY

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September 2006

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REFLEXOLOGY

Reflexology is a therapy that works on energy by stimulating specific areas in the hands and feet known as reflex points. Treatment of these reflex points promotes healing in the corresponding part of the body by stimulating the flow of energy and dispersing blockages that impede energy flow.

Reflexology has been used as a healing tool for thousands of years. Evidence of this was identified through ancient Egyptian graphics dating back to approximately 2330BC. In addition the Chinese have been using pressure as a form of healing for greater than 5000 years.

In the early twentieth century, Dr William Fitzgerald an American doctor born in 1872 came in contact with the work of pressure therapy in Vienna. From this work and other research in Europe Dr Fitzgerald divided the body into zones, which he used for anesthetic effect. Everything in each zone is connected, so pressure on a toe at one end will affect the head at the other. In his work Dr. Fitzgerald worked on the actual organ in conjunction with other organs in the zone that might be contributing to the condition i.e. looking for areas of assistance. From 1913 - ~1920 Dr Bower and Dr White pursued Dr Fitzgerald's ideas. In 1917 the combined work of Dr Fitzgerald and Dr Bowers was published in the book 'Zone Therapy'. Diagrams of the zones of the feet and the corresponding divisions of the ten zones of the body were published. Each finger and toe falls into the one zone. The theory is that parts of the body found within a certain zone will be linked with one another by the energy flow within the zone. If the energy of one part is blocked this means that the whole zone will also be blocked. The most important element of zone therapy is that it demonstrates the interrelationship between all the different parts of the body, the main principle on which Reflexology is based. By manipulating a particular area of the foot the rest of the organs in that zone will feel a positive benefit.

Dr. Riley followed on from Dr. Fitzgeralds' work, refining techniques and making the first detailed diagrams and drawings of the reflex points of the feet. Eunice Ingham, an assistant to Riley developed a map of the entire body on the feet, having realized that the whole body could be treated using the application of pressure to the feet (or hands).

During a Reflexology treatment, the energy pathways are assessed for blockage or other disturbances. Disturbances of energy can change the consistency of the feet to feel thickened, spongy, hard or the presence of grainy deposits called crystals may be detected. These grainy crystal deposits are believed to be Calcium (Ca^{2+}) deposits that have settled beneath the skin surface at the nerve endings. The Ca^{2+} deposits develop into crystals and cause congestion, which can impede the blood circulation in the feet. These crystals can be broken down by Reflexology and the residue removed by blood circulation

To achieve good health the body must go through an elimination process. This elimination process is called the *healing crisis.* A *healing crisis* is the result of every body system simultaneously eliminating waste products. The symptoms of a *healing crisis* may be identical to the condition where reactions may include skin eruptions, nausea, headache, sleepiness, unusual fatigue etc. The crisis usually lasts for approximately three days but if the energy of the client is low this may be for a week or more. During this time the body requires plenty of water to remove the toxins.

Reflexology can be performed on the feet or hands but is mainly on the feet. The feet are typically worked upon as they;

- Are strong energy poles of the body
- Have approximately 7000 nerve endings
- Are typically covered so are more sensitive to touch
- Easy to understand from the charts
- Possible to gain information on the clients state of health from the colour, feel and temperature of the feet

Reflexology can be used to treat a wide variety of conditions. Some contraindications to a reflexology treatment include:

- Contagious infectious diseases
- First trimester of pregnancy
- Atrophy or gangrene
- Conditions that require urgent and immediate surgery
- Heart attacks – allow sufficient time to allow muscle to heal
- Cancer when in treatment
- Diabetes
- Unstable blood pressure
- Epilepsy

LOW FERTILITY/INFERTILITY

INTRODUCTION

Many parts of the body must be running smoothly to conceive a baby. The man must be producing healthy, motile sperm in large enough quantities to fertilise an ovum. The womans' cervical mucus must be at the right pH and consistency. The ovaries must release healthy eggs and the fallopian tubes must be free of blockages. The uterine environment must be suitable for the implantation of the fertislised egg. And finally the endocrine system must be secreting hormones in the right sequence and at the proper levels for pregnancy to happen.

With so many requirements it is not surprising that natural human fertility is low when compared to other species; with peak human fertility (defined as the chance of pregnancy per menstrual cycle in most fertile couples) no higher than 33% (Bridge Centre, 2006). Most fertile couples (~90%) should achieve pregnancy within a year of regular intercourse. In some cases a long delay in conceiving reflects low fertility rather than infertility.

Most experts define infertility '*as not being able to get pregnant after at least of one year of trying. Women who are able to get pregnant but then have repeat miscarriages are also said to be infertile'* (Nouriani, 2006). Primary infertility is used to describe couples having problems trying to get pregnant on their first child; secondary infertility describes coupes having difficulty getting pregnant on their second child while idiopathic fertility is used to describe cases where there is no definable cause for infertility. Approximately 40% of infertility cases are related to the male; 40% related to the female and the remaining 20% are idiopathic (Access, 1996).

CAUSES OF MALE INFERTILITY

Some men produce no sperm or too few healthy sperm where an abnormal shape or structure prevents the sperm from moving correctly. Data indicates that '*One half of 1% of men were functionally sterile in 1938. …it has reached between 8-12% (an over 15 fold increase)*' (Pressinger & Sinclair, 1998). Known medical conditions causing male infertility include:

- Varicocele: where a varicose type vein develops in the testicles causing elevated temperatures (due to pooling of blood) thereby inhibiting the maturation process of the sperm.
- Ductal blockages: blockages in minute ducts which carry sperm from the testicles to the penis
- Prenatal diethylstilbestrol (DES): DES is an oestrogen type hormone taken by mothers in the 1950's and 1960's to prevent miscarriage. DES has since been shown to cause reproductive tract problems in offspring.

CAUSES OF FEMALE INFERTILITY

- Failure of ovulation (anovulation) represents 30% of infertility cases and is most commonly associated with Poly Cystic Ovarian Syndrome (PCO)(Bridge, 2006). PCO is associated with elevated levels of Luteinising Hormone. Imbalanced hormone levels as a result of Pituitary gland dysfunction may also cause anovulation.
- Age: Egg production and egg quality in a woman decline with age. The decline in fertility rates in older women is mostly due to the decline in egg quality i.e. eggs of older women are more likely to have chromosomal abnormalities (Gurewitsch, 2005).

- Endometriosis is the presence of parts of the endometrium outside of its normal location of the lining of the uterine cavity. It is commonly noted on the ovaries and fallopian tubes. During the period small cysts filled with blood can form, resulting in adhesions and decreasing fertility levels
- Blocked fallopian tubes can result from endometriosis or Pelvic Inflammatory Disease (PID).
- Fibroids are fibrous growths within the uterine wall. When they are very large they cause distortion of the uterine cavity and may cause infertility.
- Hostile Cervical Mucus is where anti-sperm antibodies are present in the mucus thereby limiting the number of sperm available to fertilise the egg

ENVIRONMENTAL FACTORS IN INFERTILITY

Lifestyle and environmental factors may often be overlooked when considering the causes of infertility. Several studies demonstrate that factors like smoking, drinking, diet and stress may impair fertility.

- Smoking: Dr. Vine's study on smoking (1994), discussed in the Pressinger & Sinclair (1998) report, indicated that smokers sperm counts are on average 13-17% lower than non-smokers. In addition they listed another study originally reported in 'The Lancet' where smoking has a mutagenic effect as male smokers demonstrate an increase in sperm abnormalities. Smoking also reduces fertility in women. Pressinger & Sinclari (1998) present a summary of the work of Dr Baird (1985) which details that 38% of female non-smokers conceived in their first attempts of conceiving a baby compared to 28% of smokers.
- Alcohol: alcohol use affects the level of oestrogen and progesterone and is also associated with menstrual cycle changes (Silva, P.D. 1999). Glenville (2000) quotes a study that demonstrated that alcohol consumption in men causes a decrease in sperm count and an increase in abnormal sperm.
- Diet: Modern day diets consist of processed and refined foods often lacking in essential vitamins and minerals, but high in fat, salt and sugar. Glenville (2002) summarized the results of a three-year study in the University of Surrey consisting of 367 couples; 37% of which had experienced infertility and 38% had experienced miscarriages. In addition many of the couples were older. At the start of the study the couples were asked to eliminate smoking and alcohol and were given personal diet supplement programs. At the end of the trial 89% had given birth to healthy babies all of which were carried to full term and required no special care baby care units.
- Stress: stress is a part of everyday living and no two people respond to stress in the same way. Stresses can originate from any aspect of a persons' life such as work, home, sport etc. Non-physical causes of infertility can lie with stress. Stress causes neurochemical changes that can impact the maturation & release of an egg i.e. stress can result in spasm in both the fallopian tubes and the uterus, which can interfere with the movement and implantation of a fertilized egg (Krogsgard & Frandsen, 2004). Also several chemical messengers involved in reproduction change when emotional status changes. Stress also affects a mans hormone balance, lowering his levels of testosterone and luteinising hormone (Glenville, 2000). In addition impotence difficulties with ejaculation are often caused by emotional distress in men (Krogsgard & Frandsen, 2004).

EMOTIONAL ASPECTS OF INFERTILITY

Braun (2006) discusses that infertility can have a significant impact on a couple life's. Facing infertility in itself can be a stressor making it more difficult for a couple to conceive. Infertility in women can trigger feelings such as anger, resentment and/or guilt at not getting pregnant

and/or using contraception for years, terminating previous pregnancy etc. This may be augmented by feelings of hatred or disgust towards their own bodies, which can impact the woman's sexual identity. In men infertility can result in feelings of isolation as impotency may impact the mans' sense of masculinity. In addition trying to start a pregnancy can interfere with a couple's normal sex life where sex becomes a chore. The lack of spontaneity and sometimes enjoyment may lead to erectile problems in men and vaginal dryness in women.

CONCLUSION

In summary though the figures throughout literature vary, it can be concluded that infertility problems can be split evenly between women and men at approximately 40% each. The causing factors in the remaining 20% of cases are often unknown.

In cases where the reason for infertility is purely medical, there are many clinics offering solutions to couples in what has now become a multi million-dollar industry. For cases where the causes of low fertility are not clear much evidence is now showing that if lifestyle and environmental factors are addressed successful outcomes do occur.

TREATING INFERTILITY WITH REFLEXOLOGY

INTRODUCTION

Complementary therapies and Reflexology in particular are becoming more widely known as solutions to low fertility levels. If there is a physical problem such as a disorder of the reproductive system the couple should always follow the advice of their gynecologist. However where there are concerns over medical intervention e.g. prolonged exposure to elevated levels of hormones and/or there is no physical concern identified by the medical profession Reflexology, often in conjunction with lifestyle changes, offers a safe and natural approach. Reflexology by encouraging deep relaxation can alleviate stress and tension both physically and emotionally. This together with improvements in diet and lifestyle (where relevant) has the potential to increase fertility levels.

REFLEXOLOGY & INFERTILITY

Some Danish Reflexologists (Krogsgard & Frandsen, 2004) believe that a couple could view low fertility/infertility as a 'friend' as it '*..often provides the information that the body of the woman or the man is not in a suitable condition, physically or mentally, to become pregnant, and thus offers a chance for change'*.

Some work presented on the positive impact of Reflexology on infertility is presented below:

- ***Has Reflexology An Effect on Infertility?*** (Ericksen 1996)
  To determine the effect of reflexology on infertility 108 women under 35 years with no previous children, and that had attempted to become pregnant for more than two years were selected from 260 applicants. Forty-seven of the 108 withdrew. The remaining 61 women were given sixteen 45-minute reflexology treatments over a 7 - 8 month period. Treatments were given 2 times a week for 4 weeks, then 2 treatments before ovulation. Nine women (15%) became pregnant within six months after starting treatment. Of two thirds of the women who had menstruation problems 77% experienced an appreciable improvement, with the majority totally getting rid of the problems. Three quarters of all the women reported improvements in other ailments such as: muscle tensions, psychic imbalances, indigestion, poor circulation and general imbalance.
- ***Jane Holt a practicing Reflexologist*** has 'published' successful outcomes of pregnancies using Reflexology on the Internet. A table presented on the web is detailed - reference Appendix I. Jane Holt presented no information on the frequency or duration of sessions.
- ***Mind, Body Sole Site -*** suggests a treatment plan of 6-10 one-hour sessions across an 8-12 week period.

REFLEXOLOGY & INFERTILITY CASE STUDIES

Kunz & Kunz at a recent seminar (June 2006) suggested that frequency; duration and strength of signal were important factors in successful Reflexology treatments. While Reflexology is not a diagnostic treatment Kunz & Kunz (2000) indicate some stress cues, which could indicate problems with certain areas of the body. Reference Appendix II for some cues related to reproductive disorders.

As part of the Reflexology accreditation 60 hours case studies must be submitted. Of the case studies undertaken two clients are trying to start a pregnancy. At the time of completion of the

essay the ten sessions were not complete, however it is intended to take the ten sessions to completion.

In treating infertility in Reflexology special attention should be paid to the following reflex points:

- Pituitary as this is the master gland and produces many of the hormones regulating the menstrual cycle
- Hypothalamus as it regulates the Pituitary hormone production
- Thyroid as over/under active thyroid function can impact fertility
- Solar plexus particularly if the client is stressed
- Reproductive organs;
    - Ovary/testicles stimulates the gland to produce sex cells and hormones
    - Fallopian tubes/Vas Deferens: stimulate the points to release any blockages that may exist
    - Uterus/Prostate gland: to increase the blood circulation and promote normal functioning
- At the end of the session chakra balancing could be completed

In addition the following aspects of the clients life should be examined to determine if they are conducive to a healthy body and mind

- Diet (for correct levels of minerals, vitamins; consumption of food pyramid groups etc)
- Lifestyle (time for relaxation, stress – can they learn to manage it, exercise etc)
- Time for self – in some case this may be the treatment itself

Since treatments first commenced, Client A has felt that the tension & stress are gone and her PMT has improved. She believes that the Reflexology has worked well in helping to re-establish a homeostasis within her body and while still obtaining Reflexology treatments is continuing to work on nutritional changes and her energy levels.

For Client B this case study has been the clients' first exposure to Reflexology and she really enjoys it, as it allows her to take an hour in the week for herself. To date she has enjoyed increased energy levels after the treatments. Client B suffers a great deal from stress and this condition will be focused upon in further Reflexology sessions.

APPENDICES

APPENDIX I: JANE HOLT OUTCOMES

Name	Age	Problem	Trying For (years)	Previous Treatment	Reflexology Sessions	Outcome
A	35	PCO; Not ovulating	4	Clomaphine ICSEx2	9	Girl
B	28	PCO; Not ovulating	3.5	Clomaphine; Perganol	6	Boy
C	29	Not ovulating; No proper cycle	2	Clomaphine	4	Girl
	Returned		N/A	None	4	Boy
D	32	Not ovulating;	2	Clomaphine	6	Girl
E	35	Dysmenorrhea	1	None	2	Girl
F	27	Dysmenorrhea	1	None	5	Due Nov 02
G	33	Dysmenorrhea	1	None	4	Boy
H	40	Miscarriage x2	2	Laparoscopy	4	Girl
I	35	Miscarriage x 1	1	None	4	Boy
J	41	Miscarriage x 1	2	Clomaphine	7	Miscarriage
K	40	Miscarriage x2	2	Clomaphine; IVFx2	7	Miscarriage
L	37	Blocked tubes	20	IVFx3	6	Pregnancy - ectopic
M	33	Unexplained	7 mnths	None	2	Girl
N	26	Unexplained	1	None	7	Boy
O	27	Unexplained	8 mnths	None	4	Due Nov 03
P	28	PCO	2	Clomaphine	4	Boy
			1	none	4	Due Nov 03
Q	33	Not ovulating	2	Clomaphine	8	Girl
R	24	PCO	2	Clomaphine	8	? - moved
S	27	Narrowed tubes; Dysmenorrhoea	4	IVFx1	13	Due May 03
T	31	Hostile Cervical mucous	2	IVFx2	9	Boy
U	36	Dysmenorrhoea	1	None	4	Boy
			1	None	4	Miscarriage
V	38	Miscarriage x2 Dysmenorrhoea	2	None	9	Boy
W	42	Unexplained	7mnths	None	6	Miscarriage
X	30	Not ovulating	3	Clomaphine	6	Boy

Name	Age	Problem	Trying For (years)	Previous Treatment	Reflexology Sessions	Outcome
Y		PCO	2	Clomaphine	4	Boy
Z	34	Irregular periods; PCO	2	Clomaphine	10	Due Nov 04
AA	31	Mild Endometriosis; Dysmenorrhoea; ovulation pain	4	Noen	22	Due Dec 04
AB	32	PCO	1	Clomaphine	12	Due Dec 04
AC	38	Miscarriage; Dysmenorrhoea	2	None	11	Miscarried @ 14 wks
AD	27	Unexplained	2	None	11	Due Jan 05
AE	37	Dysmenorrhoea	2	None	4	Due Dec 04
AF	28	Irregular periods; Dysmenorrhoea	6mnths	None	4	Due Feb. 05

APPENDIX II: STRESS CUES OF THE REPRODUCTIVE SYSTEM

Area	Stress Cue	Location Of Potential Condition
Groin/lymphatic Glands; Fallopian Tubes/Vas Deferens	Swollen ankles	Reproductive rgan problems; lower back problems; circulatory problems
Uterus/Prostate	Visible bump, puffiness or small blue veins on inside of ankle	Reproductive organ problems
Ovaries/Tests	Visible puffiness, thickness or small blue veins on outside of ankle below ankle bone	Reproductive organ problems
Pituitary	Protrusion in the ball of the big toe. When pressing on the center of the big toe a white area that stays white is visible	Experience of memory lapses and reproductive organ problems
Thyroid	Stem of the big toe feels padded or bumpy. When the toe is stretched back there is a sheet of white	Suffer from upper back, neck and/or shoulder tension; possible throat problems; associated with reproductive organ problems
Adrenal Glands	Not presented	Suffer from stress, allergies, asthma, sinus

Adapted from Kunz & Kunz 2001

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