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# Reflexology use during Pregnancy

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#### Introduction

Reflexology is a specialist massage whereby controlled pressure is applied to specific points, known as reflexes, mainly on the feet, but also on the ears, face, hands and back. Each reflex is believed to correspond to particular structures or organs of the body [1]. By applying pressure to these points the reflexologist aims to promote homeostasis and, as a result, restore and maintain physiological and psychological health and wellbeing [2]. The exact mechanism of action for reflexology has not yet been established; currently modulation of the autonomic nervous system (ANS) [3-5] and the release of endorphins following reflexology [6] are the most popular hypotheses. However, due to the lack of an established model for the theoretical and physiological underpinnings of reflexology, many health care professionals (HCP) continue to question its credibility. Nevertheless, there is a growing body of evidence to suggest that stimulation of certain reflexes can activate the corresponding regions of the brain [4,7,8]. Reflexology may be a valuable tool as studies have reported positive effects on quality of life, stress levels and pain levels [9-14]. A recent study has also reported that reflexology reduced low back and pelvic pain (LBPP) and associated disability during pregnancy [15]. Reflexology is a gentle, non-invasive treatment which may assist maternity caregivers when certain medications, interventions and procedures are contraindicated due to advancing gestation. Therefore, this report is intended to provide guidance for reflexologists, physiotherapists and other HCP regarding the current knowledge available from research and experts concerning the use of reflexology during the antenatal period.

#### **Reflexology during Pregnancy**

To date, there has been little research investigating the effects of reflexology antenatally. Concerns over its safety during pregnancy, particularly during early gestation, have likely been a major factor [16,17]. Complementary and alternative medicine (CAM) therapies such as reflexology are used, or suggested, by midwives and other HCP for a range of pregnancy-related symptoms [18]. Midwives are keen to incorporate such therapies as they consider them safe, compatible with the patient centred approach and the natural nature of pregnancy and childbirth and that CAM "can enhance their own professional autonomy" [19]. Likewise, women use CAM therapies during pregnancy as they also consider them safe, natural [20] and offer them control over their pregnancy and labour [21] and as a method of pain relief [22]. In fact many investigations into the use of reflexology during pregnancy have been carried out in the intranatal period during uncomplicated labour for pain relief [23-27].

## When can women use reflexology during pregnancy?

All reflexology treatments should be carried out by fully qualified therapists. It is a safe and enjoyable treatment to use during pregnancy [15,25,26,28,29] however, as with many interventions, caution is recommended during the first trimester [30]. Tiran [6] suggests that this is not based on any evidence, but is a precautionary measure to protect reflexologists from legal action in the event of early miscarriage. However, the following are regarded as contraindications to treatment and should be observed:

- A history of unstable pregnancy [30,31];
- Hydramnios (excess amniotic fluid) [32];
- placenta previa (grade 3 or 4) [32,33];
- A risk of deep vein thrombosis (DVT) or pre-eclampsia [33];
- Enzer [33] also suggests that diabetic mothers should check their blood sugar levels before and after treatments as reflexology can affect the hormone balance.

It is important for therapists to assess clients before each treatment as "risk" is a dynamic factor and women can change from low to high risk [34]. Therefore, advanced training in maternity reflexology, along with a thorough knowledge and understanding of the physiology of pregnancy, is essential for reflexologists to determine a client's suitability to receive reflexology and how to tailor treatments to suit each individual.

Reflexology research during the antenatal period has investigated women with a range of pregnancy related ailments such as low back and pelvic pain [15], tiredness [35] and ankle oedema [28], however, no studies to date have been carried out in any high-risk pregnant populations. Therefore, each pregnant client should be considered on a case-by-case basis with the involvement of their obstetric care providers.

Many pregnant women who use CAM therapies, such as reflexology, fail to inform their maternity health care providers [36]. Therefore, it is imperative that the use of reflexology and its mechanism of action are well understood so that midwives and other HCP can advise, discuss and document pregnant women's usage [19]. It is also very important for maternity reflexologists to explain to clients the importance of informing any other HCP from whom they are receiving treatment and to obtain written consent from obstetricians and midwives prior to treating women with a high risk pregnancy.

## Assisted pregnancy

Tiran [6] and Enzer [33] agree that, due to the purported hormone balancing effect of reflexology, women who are undergoing fertility treatment or have become pregnant following fertility treatment should not have reflexology until the pregnancy is well established. The drug therapy involved in stimulating ovulation or assisted pregnancy is likely to alter the normal hormone balance to facilitate release of the egg from the ovary or assist the embryo implantation stage. Therefore, reflexology may have a negative impact on this desired effect of fertility medication

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and such women would not be suitable to receive reflexology in the first trimester

# **Key Conclusions**

Further larger studies on how reflexology can be best employed for pregnant women are required to determine the effects on both mother and baby [15,37] and to provide health care professionals and reflexologists alike with sound information on treatment options during high- and low-risk pregnancy. HCP who wish to refer or recommend reflexology to their patients should recognise that;

- Reflexologists require advanced training on how to effectively and appropriately treat pregnant women and to provide tailored individualised treatment that is safe and effective;
- Reflexologists should recognise when and when not to treat a pregnant women and may have certain criteria which renders some women unsuitable for treatment;
- Consent to treat women experiencing a high-risk pregnancy should always be sought from the woman's maternity health care provider.

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