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GOOD PRACTICE STATEMENT

Digital vaginal examination during pregnancy

Introduction

This statement is based on a synthesis of the best available current evidence and information, and the clinical knowledge of experienced healthcare professionals. It will be subject to periodic review as the evidence base evolves. It should be noted that the statement offers guidance, and should not be regarded as prescriptive; such general advice will always require to be modified in line with the needs of any individual patient and the clinician's experience.

The aim of this particular statement is to provide guidance for the performance of digital vaginal examinations (DVEs) on pregnant women by specialist pelvic health physiotherapists in the clinical setting.

Background

There is limited evidence to guide the performance of a DVE on a pregnant woman, and there are no published guidelines by any other recognized group of healthcare professionals working in the field of obstetrics and/or gynaecology. Clinicians will treat each patient as an individual, and weigh up the indications, potential benefits and possible risks of performing a DVE in each case.

A search of the published literature found a number of studies in which clinical assessment of the pelvic floor muscles (PFMs) during pregnancy was used as part of the assessment process and methodology. The exclusion criteria mentioned in these papers included: genitourinary pathology (Sampselle *et al.* 1998); neurological disorders (Reilly *et al.* 2002); an ongoing urinary tract infection (Mørkved *et al.* 2003); pregnancy complications and a high risk of pre-term labour (Dinc *et al.* 2009); pain during PFM contraction (Ko *et al.* 2011); and a high-risk pregnancy (Stafne *et al.* 2012). There was no consensus across the studies regarding the definitions of "high-risk pregnancy", "pregnancy complications" or "high risk of pre-term labour".

As per usual practice, informed consent is essential in any physical intervention with a pregnant woman, and further discussion with her primary healthcare provider may be warranted in cases where there are any concerns about the pregnancy. Absolute contraindications must be respected, and any cautions or considerations sufficiently assessed.

Effects of pregnancy on the pelvic floor

Pregnancy is associated with anatomical, physiological and biochemical changes in the body, and a good understanding of the effects of these alterations is important for optimal care and the prevention of symptoms. These changes have been described in relation to the cardiovascular, gastrointestinal, urogenital, haematological, endocrine and musculoskeletal systems (Tan & Tan 2013). As the foetus develops, evidence has shown changes that may result in pelvic girdle dysfunction (Reese & Casey 2015), reduced PFM function (Rahn *et al.* 2008) and urinary incontinence (Wijma *et al.* 2001).

Indications and contradictions for digital vaginal examination

Possible indications for a DVE by a specialist physiotherapist during pregnancy include:

- symptomatic bowel, bladder or sexual dysfunction;
- symptoms of coccyx or lumbopelvic pain;
- teaching PFM awareness and prescribing exercises;
- perineal massage education and birth preparation; and
- assessment of symptomatic pelvic organ prolapse.

Contraindications/precautions for a DVE in the general population include:

- lack of consent;
- < 6 weeks since childbirth;
- < 6 weeks following surgery to the urogenital region;

- active vaginal or urinary tract infection;
- bleeding of unknown origin; and
- a painful or infective skin condition.

Please note that the above contraindications/precautions are based on observations and recommendations from common clinical practice, and have no published evidence base.

With regard to contraindications for DVEs in a pregnant population, a thorough subjective assessment is important in order to:

- establish the potential indications for and benefits of the DVE;
- ascertain informed consent, as per usual practice; and
- screen for any potential risks, contraindications or considerations in pregnancy (see the list below).

It must be noted that these possible contraindications are based on clinical reasoning and generally considered good practice, rather than a strong evidence base. In a pregnant woman for whom there are specific concerns/considerations, these points may be added to the consent process and any potential risks discussed.

Commonly cited pregnancy-related contraindications/precautions include:

- the first trimester;
- a high-risk pregnancy;
- a high risk of pre-term labour;
- pregnancy complications;
- pre-eclampsia;
- placenta praevia;
- cervical changes;
- per vaginal bleeding;
- a urinary tract infection;
- a vaginal infection/genitourinary pathology;
- pain on PFM contraction;
- a history of premature rupture of the membranes or pre-term labour;
- a history of miscarriage; and
- if the patient has been given any specific instructions by their healthcare provider [e.g. a consultant obstetrician, general practitioner (GP) or midwife], such as advice to avoid sexual intercourse, exercise, and certain positions, postures and/or activities.

In women for whom there are contraindications or sufficient risks have been identified, it may be clinically relevant to discuss the indications for an assessment of PFM function. If this is consented to, then the clinician should proceed with external observation and/or palpation of the external perineum. This represents a low-risk alternative to a DVE that can provide the physiotherapist with some information to guide treatment.

Clinicians performing a DVE or perineal assessment must be working within their scope of practice and adhering to local policy. Clinical guidelines within each trust or practice may be in place, and these may be modifiable following communication between consultant obstetricians and gynaecologists, and specialist pelvic health physiotherapists.

The present statement is based on the best available information, and the clinical knowledge of experienced healthcare professionals. It will be updated if new evidence or guidelines become available (review date: 2021).

Practice points

The following points should be noted:

- Complete a thorough subjective assessment for each individual client.
- Apply clinical reasoning and identify indications for DVE.
- Screen for any contraindications, potential risks or specific considerations, as guided by clinical reasoning and good practice.
- Discuss any specific considerations with the patient, and if required, with her consultant or GP, with the patient's permission.
- As per usual practice, record consent.
- If a DVE is not deemed appropriate, record the decision. Consider external observation and/or palpation of the perineum to give feedback on PFM function.
- Always work within your scope of practice and adhere to any local policies.

Pelvic, Obstetric and Gynaecological Physiotherapy

References

Dinc A., Kizilkaya Beji N. & Yalcin O. (2009) Effect of pelvic floor muscle exercises in the treatment of urinary incontinence during pregnancy and the postpartum period. *International Urogynecology Journal and Pelvic Floor Dysfunction* **20** (10), 1223–1231.

Ko P.-C., Liang C.-C., Chang S.-D., *et al.* (2011) A randomized controlled trial of antenatal pelvic floor exercises to prevent and treat urinary incontinence. *International Urogynecology Journal* **22** (1), 17–22.

Mørkved S., Bø K., Schei B. & Salvesen K. Å. (2003) Pelvic floor muscle training during pregnancy to prevent urinary incontinence: a single-blind randomized controlled trial. *Obstetrics & Gynecology* **101** (2), 313–319.

Rahn D. D., Ruff M. D., Brown S. A., Tibbals H. F. & Word R. A. (2008) Biomechanical properties of the vaginal wall: effect of pregnancy, elastic fiber deficiency, and pelvic organ prolapse. *American Journal of Obstetrics and Gynecology* **198** (5), 590.e1–590.e6.

Reese M. E. & Casey E. (2015) Hormonal influence on the neuromusculoskeletal system in pregnancy. In: *Musculoskeletal Health in Pregnancy and Postpartum: An Evidence-Based Guide for Clinicians* (eds C. M. Fitzgerald & N. A. Segal), pp. 19–39. Springer International Publishing, Cham.

Reilly E. T. C., Freeman R. M., Waterfield M. R., *et al.* (2002) Prevention of postpartum stress incontinence in primigravidae with increased bladder neck mobility: a randomised controlled trial of antenatal pelvic floor exercises. *BJOG: An International Journal of Obstetrics and Gynaecology* **109** (1), 68–76.

Sampselle C. M., Miller J. M., Mims B. L., *et al.* (1998) Effect of pelvic muscle exercise on transient incontinence during pregnancy and after birth. *Obstetrics & Gynecology* **91** (3), 406–412.

Stafne S. N., Salvesen K. Å., Romundstad P. R., Torjusen I. H. & Mørkved S. (2012) Does regular exercise including pelvic floor muscle training prevent urinary and anal incontinence during pregnancy? A randomised controlled trial. *BJOG: An International Journal of Obstetrics and Gynaecology* **119** (10), 1270–1280.

Tan E. K. & Tan E. L. (2013) Alterations in physiology and anatomy during pregnancy. *Best Practice & Research: Clinical Obstetrics & Gynaecology* **27** (6), 791–802.

Wijma J., Weis Potters A. E., de Wolf B. T. H. M., Tinga D. J. & Aarnoudse J. G. (2001) Anatomical and functional changes in the lower urinary tract during pregnancy. *British Journal of Obstetrics and Gynaecology* **108** (7), 726–732.