



Topic Exploration Report

Topic explorations are designed to provide a high-level briefing on new topics submitted for consideration by Health Technology Wales. The main objectives of this report are to:

1. Inform discussions on new topics received by HTW.
2. Determine the quantity and type of evidence available on a topic.
3. Assess the topic against HTW selection criteria.

Topic:	Translabial ultrasound scanning
Topic exploration report number:	TER007
Referrer:	Jonathan Williams, Welsh Government
Topic exploration undertaken by:	Health Technology Wales

Aim of Search

Health Technology Wales searched for evidence on the effectiveness of translabial ultrasound scanning for diagnosing and assessing complications following vaginal mesh insertion, or any UK-based guidelines of commissioning documents on the use of translabial ultrasound for this indication.

Summary of Findings

The NICE Guideline *Urinary incontinence (update) and pelvic organ prolapse in women: management* is in development and due to be published in April 2019. This guideline includes a review of the evidence on the assessment of mesh complications after pelvic floor surgery using a range of interventions. Including translabial ultrasound. Draft findings from this Guideline report that no clinical evidence on the assessment of mesh complications was found that compared translabial ultrasound to any other intervention or test.

Literature searches by HTW identified four studies on the effectiveness of ultrasound in the assessment of mesh-related complications. Two of these compared findings with translabial ultrasound to surgery/physical examination; outcomes reported focussed on initial diagnostic findings and did not report any information about the influence of translabial ultrasound on subsequent treatment planning or long-term patient outcomes. The remaining two studies looked at endovaginal ultrasound; it is unclear whether these provide evidence relevant to the exact indication in question.

We did not identify any UK commissioning advice, or evidence-based guidelines that support the use of translabial ultrasound in the assessment of mesh-related complications.

Key sources of evidence

NICE Guideline (in development): Urinary incontinence (update) and pelvic organ prolapse in women: management. Draft guideline, due for final publication in April 2019: <https://www.nice.org.uk/guidance/gid-ng10035/documents/draft-guideline>

NICE evidence review K: Assessing mesh complications after pelvic floor mesh surgery. Draft version for consultation; due for final publication in April 2019: <https://www.nice.org.uk/guidance/gid-ng10035/documents/evidence-review-6>

Areas of Uncertainty

Evidence on the effectiveness of translabial ultrasound for diagnosing and assessing complications following vaginal mesh insertion is very limited, in common with other diagnostic techniques for this indication. We did not identify any published UK guidelines or policies that support the use of translabial ultrasound. A NICE guideline that includes recommendations on the use of translabial ultrasound and other investigations for mesh complications is due to be published in April 2019. Draft recommendations include that further research is needed into the effectiveness of ultrasound-guided visualisation to identify complications after mesh surgery. We did not identify any ongoing trials that address this question.

Brief literature search results

Resource	Results
Guidelines and guidance	
<p>NICE We searched for guidelines, technology appraisals, diagnostics, interventional procedures, and medical technologies guidance.</p>	<p>NICE Guideline (in development): Urinary incontinence (update) and pelvic organ prolapse in women: management. Expected publication date: 02 April 2019. https://www.nice.org.uk/guidance/indevelopment/gid-ng10035 Includes an evidence review on assessing mesh complications after pelvic floor mesh surgery: https://www.nice.org.uk/guidance/gid-ng10035/documents/evidence-review-6 We did not identify any other relevant published or ongoing NICE Guidance.</p>
<p>Healthcare Improvement Scotland: We searched the HIS website for any relevant advice and hand-searched Scottish Health Technologies Group and Scottish Intercollegiate Guidelines Network publications.</p>	<p>We did not identify any guidance from Healthcare Improvement Scotland on the assessment of mesh-related complications.</p>
<p>Guidelines International Network</p>	<p>We did not identify guidelines in the Guidelines International Network database on the assessment of mesh-related complications.</p>
<p>Other sources</p>	<p>We also searched the websites of the Royal College of Obstetrics and Gynaecology and NHS England Commissioning for relevant guideline or policies. No relevant information was found.</p>
Secondary literature and economic evaluations	
<p>Cochrane library We searched for relevant Cochrane Reviews.</p>	<p>We did not identify any systematic reviews, economic evaluations or evidence-based guidelines on the use of ultrasound in the assessment of mesh-related complications.</p>
<p>Medline We searched the Medline database for systematic reviews, meta-analyses, economic evaluations only.</p>	<p>We did not identify any systematic reviews, economic evaluations or evidence-based guidelines on the use of ultrasound in the assessment of mesh-related complications.</p>
Primary studies	
<p>Medline We searched the Medline database for studies of any design.</p>	<p>We identified four studies of the effectiveness of ultrasound in the assessment of mesh-related complications. It is unclear whether these provide evidence relevant to the exact indication in question.</p> <ol style="list-style-type: none"> 1. Javadian, P., L. H. Quiroz and S. A. Shobeiri (2017). "In Vivo Ultrasound Characteristics of Vaginal Mesh Kit Complications." <i>Female Pelvic Med Reconstr Surg</i> 23(2): 162-167. 2. Manonai, J., G. Rostaminia, L. Denson and S. A. Shobeiri (2016). "Clinical and ultrasonographic study of patients presenting with transvaginal mesh complications." <i>Neurourol Urodyn</i> 35(3): 407-411. 3. Staaack, A., J. Vitale, N. Ragavendra and L. V. Rodriguez (2014). "Translabial ultrasonography for evaluation of synthetic mesh in the vagina." <i>Urology</i> 83(1): 68-74. 4. Viragh, K. A., S. A. Cohen, L. Shen, N. Kurzbard-Roach, S. Raz and S. S. Raman (2018). "Translabial US: Preoperative Detection of Midurethral Sling Erosion in Stress Urinary Incontinence." <i>Radiology</i> 289(3): 721-727.
<p>Cochrane library</p>	<p>We did not identify any trials (published or ongoing) on the use of ultrasound in the assessment of mesh-related complications.</p>

<i>We searched the Cochrane Trials database for studies of any design.</i>	
Ongoing research	
Clinicaltrials.gov	We did not identify any ongoing trials studying the use of translabial ultrasound for the assessment of mesh-related complications.

Date of search:	December 2018
Concepts used:	ultrasound, translabial complications, vaginal mesh, mesh complications