

## CLINICAL TIP

### A new assessment for Risk of Avulsion

With the increasing evidence that levator avulsion is a major risk factor for anterior and central compartment prolapse there is mounting pressure for physiotherapists to be able to identify this specific form of pelvic floor trauma. Unfortunately, research on previous palpation methods has shown poor predictive ability to accurately make this diagnosis.

Recently, Kruger, Dietz and Dumoulin (2013 *Neurourology and Urodynamics*) have published research indicating that the measurement of the "Width Between Insertion Sites" has the highest sensitivity and specificity of the various digital methods in predicting levator avulsion.

#### What is "Width Between Insertion Sites":

##### Protocol:

- Patient is asked to first perform a series of PFMC to facilitate muscle bulk and make palpation easier
- Distance between insertion sites of muscle is then estimated by parting the finger up behind the pubis until the muscle bulk can be palpated on either side of the examining fingers.

The authors suggest a cut-off of >3.5cm as a high chance of avulsion.

(Distance is estimated with 3 finger width = ~4cm)

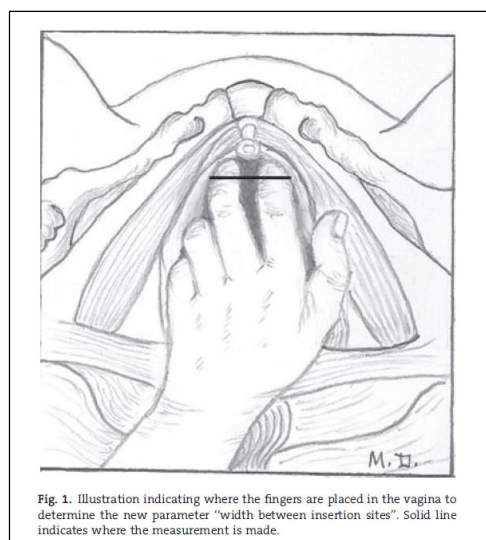


Fig. 1. Illustration indicating where the fingers are placed in the vagina to determine the new parameter "width between insertion sites". Solid line indicates where the measurement is made.

#### How accurate is using a cut-off of 3.5cm for diagnosis of avulsion?

	In women in whom Avulsion was present on ultrasound	In women whom Avulsion was not present on ultrasound
<b>Distance between Insertion Sites Method</b>	78% identified as having a distance >3.5cm and therefore avulsion	90% identified as having a distance <3.5cm and therefore no avulsion
<b>Palpation of Absence of Muscle - % Identified correctly</b>	60% identified as having an absence of muscle bulk and therefore avulsion.	92% Identified as having muscle bulk present and therefore no avulsion

**NOTE!** The authors do acknowledge however that width between insertion sites is unable to discriminate unilateral from bilateral avulsion.

**Reference:** Kruger J, Dietz H, Budgett S and Dumoulin C (2013), Comparison between transperineal ultrasound and digital detection of levator ani trauma. Can we improve the odds? *Neurourology and Urodynamics*.