

DOES THE APPEARANCE OF MINIARC SLING ON 2D ULTRASOUND REALLY MATTER?

AIM

The aim of the study was to assess the appearances of the Miniarc sling on 2D transperineal ultrasound and whether this appearance reflects the outcomes of the surgery.

METHODS

Twenty one patients who had the Miniarc sling for the treatment of primary urinary stress incontinence underwent 2D transperineal ultrasound scanning at 3 months postoperatively to assess the appearance and shape of the Miniarc tape at the level of mid urethra. The outcomes of the surgery were evaluated at 3 months with Urodynamic studies.

RESULTS

There were 2 different distinct patterns of how the miniarc tape appeared at the level of the mid urethra on 2D ultra sound. Ten (48%) Miniarc slings appeared to be sitting flat or straight at the level of mid urethra (flat group) and the remaining 11 (52%) seems to be 'hugging the urethra' and gave an unique 'C' shape appearance on 2D ultra sound (C group).

5 patients (50%) in the 'flat' group were still incontinent on cough test compared to only 2 patients (18%) in the 'C' shape. Among the patients in the 'flat' group, one patient had voiding dysfunction and another patient had detrusor overactivity with leakage. However none of the 'C' group patients had such complications.

Urethral hypermobility was noted in 8 patients (80%) in the flat group compared to only 2 patients (18%) in the C group.

CONCLUSION

The patients whose Miniarc slings appeared as a 'C' shape on 2D transperineal ultrasound have better objective cure rate with no complication. It also seems to restrict the mobility of the urethra post operatively which would explain the higher cure rate. The 'C' feature is a consequence of tensioning of the Miniarc tape with "pillowing" intraoperatively and the scan results seems to confirm that. This unique appearance is the first described in the literature.

<i>Specify source of funding or grant</i>	Nil
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>Is this a Randomised Controlled Trial (RCT)?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	The Mater Misericordiae Hospital ethics committee The Townsville Hospital ethics committee
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes