



Midurethral sling surgery for stress urinary incontinence: an Asian perspective footnote from the Pan-Asia meeting

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In the 1990s, gynecologic surgeons began the widespread use of mid-urethral slings (MUS) for the surgical treatment of stress urinary incontinence (SUI) [1]. These minimally invasive procedures involved surgical placement of narrow, synthetic polypropylene tape beneath the mid-urethra and via dynamic support prevents urinary leakage [1, 2]. While non-surgical intervention such as pelvic floor muscle training is recommended as initial management, many women prefer surgical treatment to alleviate the symptoms of stress urinary incontinence and their effect on their quality of life.

Globally, in the last decade, > 90% of surgeons have used MUS for SUI (Fig. 1). From the perspective of the Asian continent, the numbers have been slightly less than for their Western counterparts. Between East and West Asia there has not been much difference. During the Pan-Asia meeting in 2016, we conducted a survey on the usage of mesh and included mid-urethral slings. We looked into the type(s) of primary and secondary SUI surgery performed in Asian countries specifically including the option of MUS.

Among the responses from participants in the Asian countries (Fig. 2), in seven out of ten countries surveyed, the majority used MUS for primary SUI. Indonesian doctors are utilizing anterior colporrhaphy as the surgery of choice for SUI > 90% of the time. In Thailand and India about 60% are using MUS as primary surgery for SUI with anterior colporrhaphy as the second most common surgery. The second choice of surgery among the other countries is Burch colposuspension.

When we looked into the routes for MUS, differences were seen (Fig. 3). Fifty percent of the surveyed countries chose the transobturator (TOT) inside-out route in the majority of cases. Japan and Indonesia used the transobturator outside-in route in the majority of cases, while in Malaysia a similar percentage was used between these two TOT routes. The Philippines on the other hand used a bottom-up retropubic MUS in > 90% of cases. In Taiwan, both TOT routes including single incision slings (SIS) were almost equally utilized. In other countries the SIS was used in about 20%, 10% and 3% in China, Hong Kong and Thailand, respectively. Perhaps the main reasons for lower usage of SIS in these countries were that they were late adopters of newer techniques and had differing availability of these kits. From the survey, SIS was available in all countries except Indonesia and the Philippines. This may also reflect the lack of specialists trained in the field of urogynecology in the other countries.

Only Indonesia uses anterior colporrhaphy for SUI surgery in most (> 80%) cases; for secondary SUI a MUS is used, the TOT inside-out (Fig. 4). The rest of the countries favor MUS as the form of treatment for secondary SUI where seven out of ten used TVT as the type of MUS. India and Thailand use TOT inside-out and TOT outside-in respectively for secondary SUI surgery (Fig. 5).

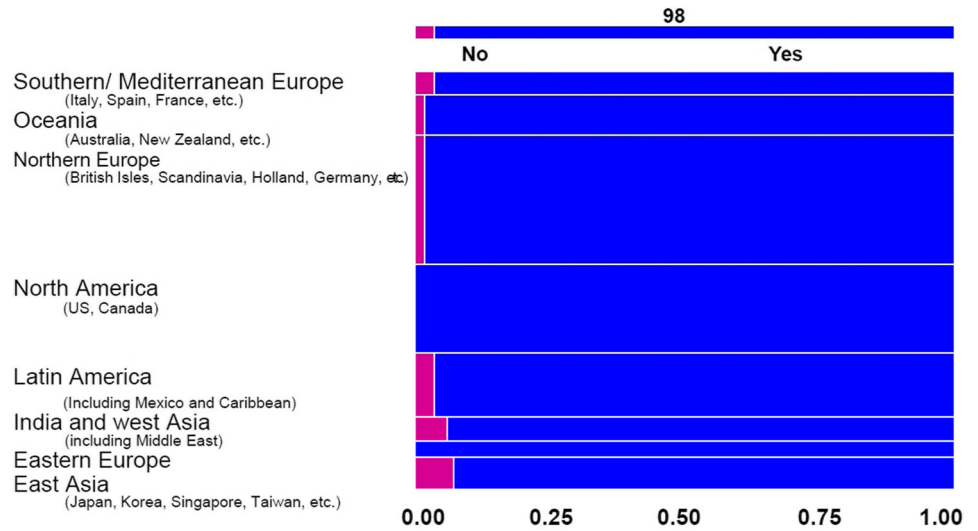
As previously reported, the subspecialty of urogynecology has developed at different rates throughout Asia, which may be the reason for the various attitudes toward using mesh products for incontinence surgery [3]. In the last half decade, the use of “mesh” and even slings has been under pressure because of increasing litigation. There are now updated

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Fig. 1 Use of mesh for POP in 2018. Printed with permission from Prof. Willy Davila, IUGA Annual Meeting, 2018

PP mesh for SUI



Q7. Have you used PP mesh slings for SUI in the past 10 years?

Davila W. IUGA. Jun. 30th, 2018

Fig. 2 Type of PRS (pelvic reconstructive surgery) for primary POP (POPQ III and IV) in 11 selected countries/areas in Asia in 2018

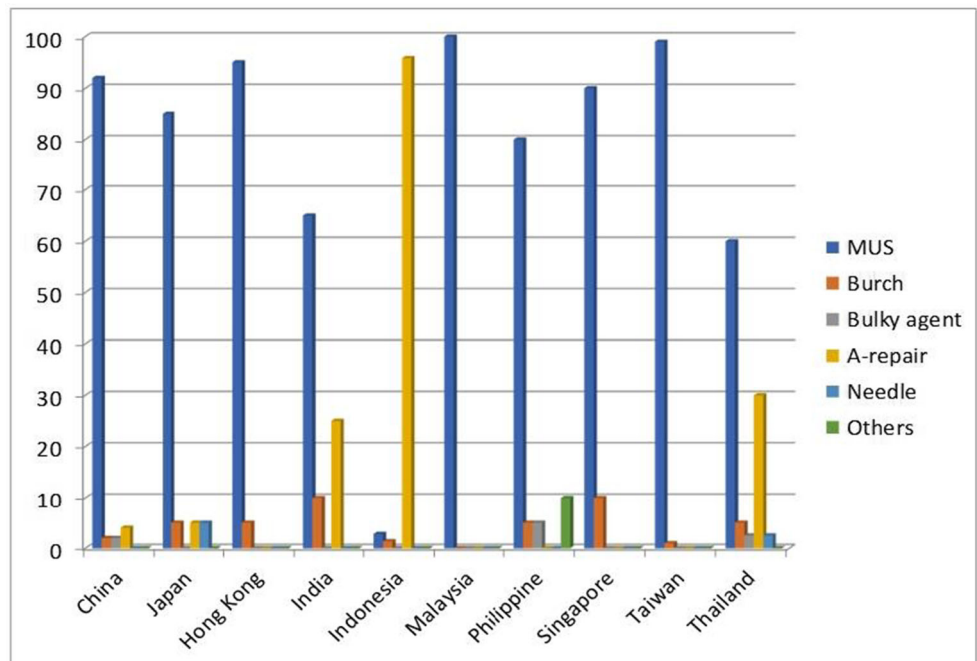


Fig. 3 Types of PRS for recurrent advanced prolapse in 11 selected countries/areas in Asia in 2018

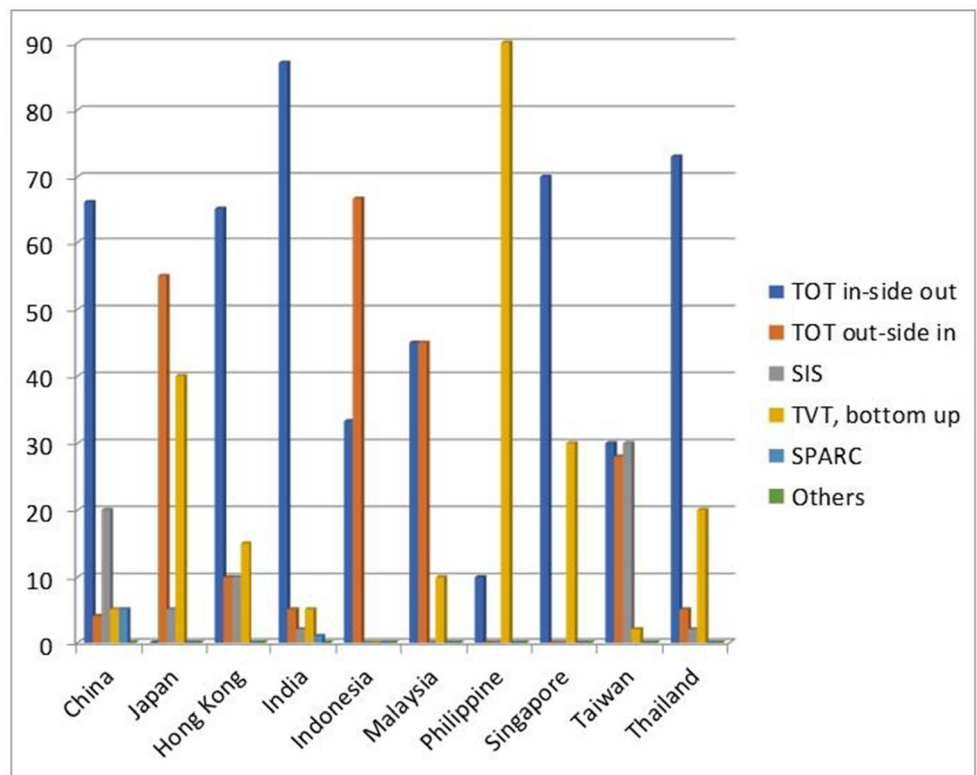


Fig. 4 Type of urinary incontinence surgery for secondary SUI on 10 selected countries/area, Pan-Asia Meeting, IUGA 2016

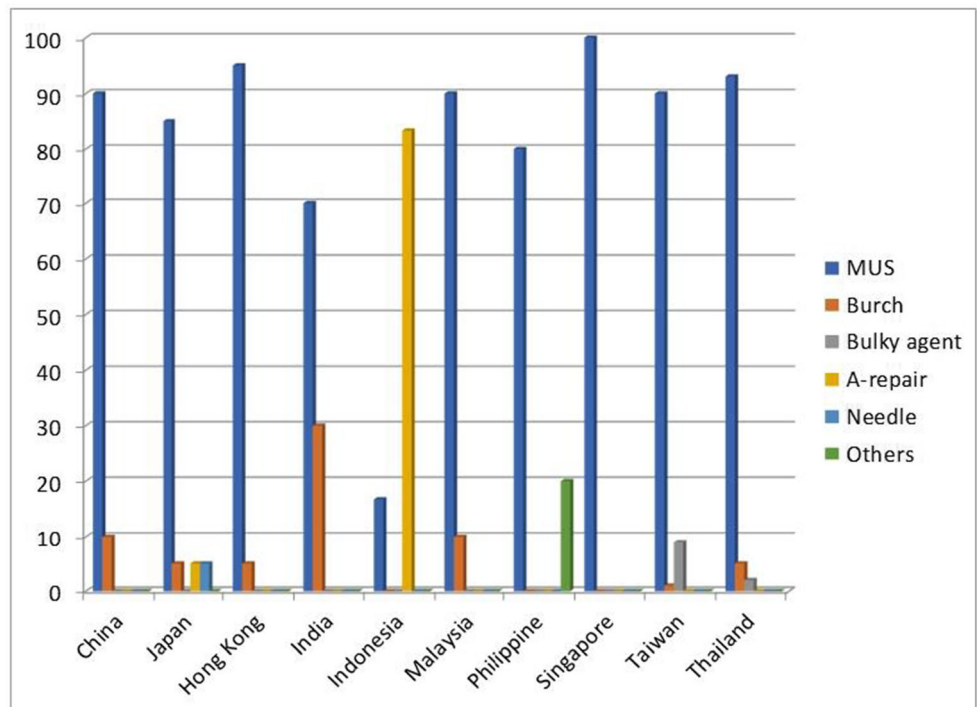
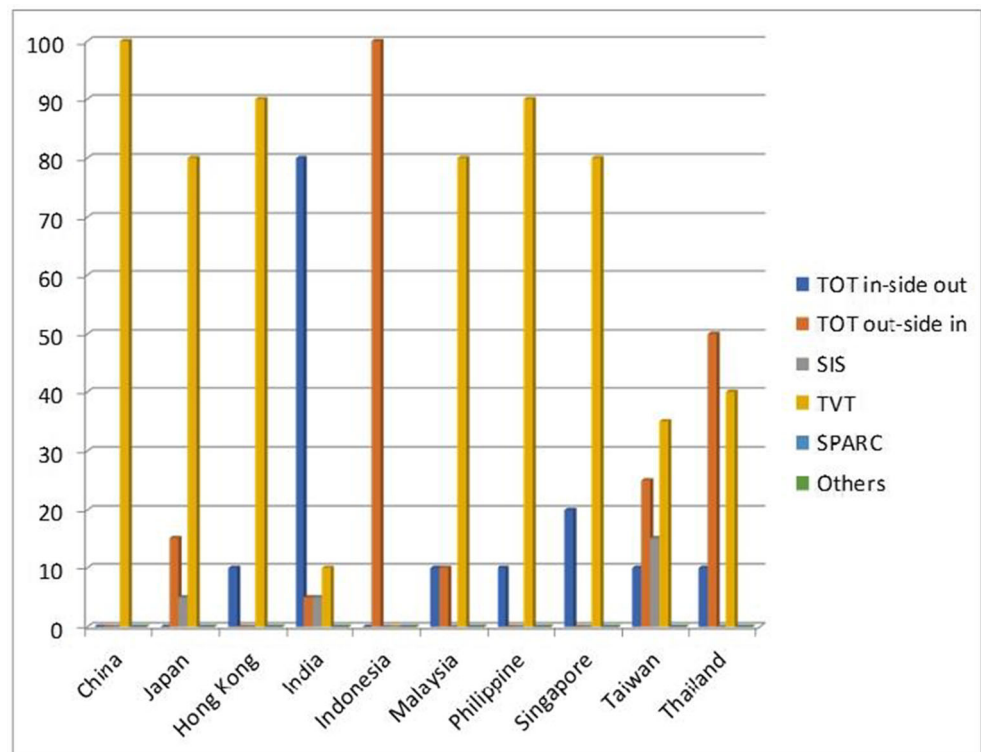


Fig. 5 Type of Mid-urethra sling surgery for secondary SUI on 10 selected countries/area, Pan-Asia Meeting, IUGA 2016



guidelines, and many include notification or reporting about associated complications. Mid-urethral sling operations have been extensively researched and shown good safety profiles [4]. Statements from various international expert societies including the IUGA (International Urogynecology Association) support the use of MUS [5]. Continuous reporting of longer-term outcome data is nevertheless needed in the interim as this would substantially increase the evidence base and provide a clearer picture of the effectiveness and adverse events.

Authors' contributions TS Lo: Project development, Data collection, Data analysis, Manuscript editing.

YL Tan: Manuscript writing, Data analysis, Manuscript editing.

Compliance with ethical standards

Conflict of interest The authors report no conflict of interest.

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