

# Is it time to close the “defects” in hernia surgery?

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Hernia repair is one of the commonest operations a general surgeon performs yet a literature search on the topic in South Africa finds less than ten original articles and only a handful of case reports. In this edition of the SAJS, there are four publications on local hernia surgery which contribute significantly to the flimsy body of evidence available.

One of the dilemmas in hernia surgery is that no long-term follow-up is the default position, when five to ten years is the period required to gather robust evidence of efficacy, in particular on rates of recurrence. This is compounded by the fact that the industry develops a new, “better” mesh quicker than the evidence of equivalence or superiority can be accumulated. This is well illustrated by the best-selling hernia product being the ventral hernia patch devices, yet the evidence for their use is lacking. The MORPHEUS trial, a multi-centre randomised study comparing a simple pre-peritoneal mesh with a ventral patch device has clearly demonstrated a significant advantage in favour of the simple mesh.<sup>1</sup> Marketing drives the use of the specialised mesh design as a more convenient quick and easy operation, rather than the one with a better outcome.

In an attempt to address these dilemmas worldwide, registries have proliferated and, some would argue, provide a better evidence base than randomised controlled trials on which to base best practice. The HIG(SA) national hernia registry ([www.higsa.co.za](http://www.higsa.co.za)) has been live online since February 2019.<sup>2</sup> A bilateral inguinal hernia takes less than five minutes to log on the system and the datapoints can be easily selected on the computer interface or smartphone app. Of the 169 surgeons, which includes trainees, who have registered, more than half are from the Western Cape. Over the past 30 months, the registry accumulated data on 723 ventral hernias and 1 138 groin hernias, 54% and 46% from the private and state sectors respectively. It is difficult to understand why over 80% of general surgeons in South Africa do not enter their patient details. The registry is free, unlike in Finland where 30 000 euros is required to register a site, making cost the greatest barrier to participation in that country. Does the desire for an incentive to drive data entry always outweigh the possibility of greater good? Locally there is no legislation to make participation mandatory and that is unlikely to change. Funders could consider only reimbursing a mesh if the patient details are logged on the registry? Hopefully, more awareness of the guidelines and the registry will overcome the inertia to participation, and publication of the findings will have more of an influence on practice.

In this edition, Gouws et al. reports on the registry’s first year’s ventral hernia results evaluating the compliance in practice to six key guidelines as published in 2016.<sup>3,4</sup> Four of the six guidelines evaluated had fairly good compliance, but the great disappointment was the poor 30-day follow-up data. It makes for interesting reading, but one suspects the results are influenced by the inherent bias that the surgeons who read the guidelines are the same as those who participated in the registry.

Complex abdominal wall repair (CAWR) is the topic of many a webinar. I was recently involved in a Delphi process with a national group of enthusiasts and we had difficulty defining implications of CAWR. There was consensus that CAWR was unlikely to be successful with a simple retro rectus repair and that ancillary techniques are required. During my specialist training, the more eloquent parts of these repairs were taboo for the general surgeon and plastic surgeons were invited to perform an anterior component separation. With the centralisation of subspecialty oncological surgery in the more mature healthcare systems, hernia repairs were, by proxy, concentrated in the peripheral centres.

This led to high-volume hernia surgeons recognising the need for preoperative conditioning and preparation. They took great interest in acquiring mastery of all the techniques to take ownership of good long-term outcomes.<sup>5</sup> In particular, this led to a subspecialist centralised approach for CAWR. The surgeons at Chris Hani Baragwanath Academic Hospital must be commended for their report on their experience with one of these CAWR strategies, namely progressive pneumoperitoneum, illustrating that good outcomes can be achieved with CAWR at centres where there is both eagerness and know-how.<sup>6</sup> The group from Pietermaritzburg also recognised the need for this in their honest account on their ventral hernia cohort.<sup>7</sup> They further highlight the need to actively manage hernia patient’s comorbidity profile. They showed that being too passive resulted in emergency operations with a guarded prognosis. A pattern also noted in Cape Town where cancelled electives presented as emergencies requiring more complex surgery.<sup>8</sup> Often hernia patients are deemed unfit or unsuitable for an elective repair, just to become tomorrow’s emergencies – a trend we should aim to reverse.

The innovative and growing field of hernia surgery is also demonstrated in a narrative and video format account of laparoscopic percutaneous internal ring suture by the paediatric surgeons from Pietermaritzburg.<sup>9</sup> They report

excellent results from the adoption of this technique and purport it to be the method of choice for inguinal hernia repair in children.

Hernia surgery has truly moved from the *secunda mensa* to the *principalis prandium*. It is surely time to adopt an evidence-based approach to achieve the lowest recurrence rate possible by the simplest most cost-effective method. Time to use the HIG guidelines, enrol in the registry and close the “defects” in hernia surgery.

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