Ventral Hernia – South Africa 2016

R Oodit

Chair: Hernia Interest Group South Africa

Ventral hernia repair is one of the most common general surgical procedures. An estimated 20 million patients with hernias are operated on worldwide every year. An incisional hernia will develop in 10–15% of patients with an abdominal incision. The risk increases to 23% in those who develop surgical site infection. Recurrence rates of up to 69% have been reported in high-risk patients.

The last two decades have seen significant advances in surgical technique, indications for surgery, types of mesh, fixation devices and imaging techniques. Techniques include open and laparoscopic surgical repair, component separation, abdominal wall reconstruction and variable mesh placements positions.^{1,2} Meshes are now firmly established as a routine in incisional hernia repair but the choice of mesh is not always simple as the number and type of meshes available have increased substantially.^{3,4} Biological meshes have evolved immensely and are physiologically sound, but outcomes are inconclusive. It is also well established that the best opportunity for a successful outcome is the first repair.

This period has also seen significant advances in the prevention of incisional hernias. Abdominal wall closure techniques have evolved, recommendations for port site closures have changed and new ports offer the possibility of reduced risk of incisional hernias.

There has been a shift to embracing the principles of enhanced recovery and risk stratification for patients with complex ventral hernia repairs.^{5,6} The concept of a tailored approach focusing on pre-habilitation, the establishment of effective multidisciplinary teams and individualized care pathways is now well recognised. The CeDAR app and the P-POSSUM scores are useful tools for facilitating patient discussion and projecting potential benefits that will accrue with risk modification.

Standard of care decrees that the patient remain central to and involved in all management care decisions. Patients should be informed about recurrence rates, placement of a mesh, its potential complications and the risks and potential change in operative management in the event of an inadvertent enterotomy.

The total number of hernia publications have increased substantially in the last two decades, greater than the overall growth of PubMed during this period. This period has also seen a shift to evidenced-based patient-centered care and an increased recognition of the value add of good quality outcome data.

Ventral hernia care needs to be optimised in South Africa (SA). Care needs to shift from a tradition of surgical doctrine to a tailored, patient-centered evidence and consensus-based paradigm. There is a need to measure patient outcomes. To this end, the merits of implementing audit programs, databases and registries need to be debated and addressed. The value add of hernia units for complex hernia care in SA needs to be discussed. Teaching and training needs to include current best practice, and research that informs clinical practice is essential.

In developing the ventral hernia guidelines, the Hernia Interest Group (HIG) has presented objective, locally relevant material that will be useful to all surgeons, referring doctors, the health care industry and funders. It will also provide a platform for robust discussion and assist in aligning education, training and research programs with best practice.

These are the first national and international guidelines for open and laparoscopic ventral hernia care and follow on the publication of inguinal hernia guidelines in the SAJS 2015. The establishment of guidelines is a dynamic process, and the intention is to update the guidelines every three years.

REFERENCES

- Pauli EM, Rosen MJ. Open ventral hernia repair with components separation. Surg Clin North Am. October 2012; 93:1111-1133.
- Koltz PF, Frey JD, Bell DE, Girotto JA, Christiano JG, Langstein HN. Evolution of abdominal wall reconstruction: development of a unified algorithm with improved outcomes. Ann Plast Surg. November 2013;71:554-560.
- 3. Klinge U. Mesh for hernia repair. Br J Surg, 2008;95:539-540
- 4. Choi JJ, Palaniappa NC, Dallas KB, Rudich TB, Colon MJ, Divino CM. Use of mesh during ventral hernia repair in clean-contaminated and contaminated cases: outcomes of 33,832 cases. Ann Surg. January 2012;255(1):176-80.
- Fischer JP, Wink JD, Nelson JA, Kovach SJ. Among 1,706 cases of abdominal wall reconstruction, what factors influence the occurrence of major operative complications? *Surgery* February 2014;155:311-319.
- Berger RL, Li LT, Hicks SC, Davila JA, Kao LS, Liang MK. Development and validation of a risk-stratification score for surgical site occurrence and surgical site infection after open ventral hernia repair. J Am Coll Surg. December 2013;217:974-982
- 7. Kingsnorth A, LeBlanc K. Hernias: inguinal and incisional. The Lancet November 2003.362 (9395);1561-1571.