

The Evolving Surgical Approaches in Challenged Resource Settings

Sir,

We read with interest the article of Zakaria^[1] published in the last issue of the journal.

The surgical approach to infantile hypertrophic pyloric stenosis (IHPS) has changed in the last 30 years, and many surgeons changed their approach to perform pyloromyotomy. First change was adopted from the conventional right upper quadrant approach (RUQ) to a supraumbilical skin-fold incision described for the first time by Tan and Bianchi in 1986.^[2] This approach gained popularity for excellent cosmetic results and low complication rate. However, as described by the author, some studies observed that the circumumbilical (CU) approach led to an increase in the rate of wound infection and longer operative time compared to the RUQ approach. The use of preoperative antibiotic prophylaxis may reduce wound infection as reported in the article, but regarding the operative time, only skills and experience of surgeons can make the difference. In our recent manuscript, we reported a change in our approach to IHPS from RUQ to CU to improve the cosmetic results. In the first cases, we had some difficulties in detecting the pylorus in particular in those patients who had distended bowel. To avoid this problem, we conceived the idea to perform a hybrid technique, the single-port laparoscopic-assisted pyloromyotomy (SPLAP),^[3] to approach the IHPS by a CU incision with the help of an operative laparoscope that eased a quick detection of the pylorus even in this condition. Our long-term results with this technique confirm the good results obtained in the preliminary experience with a further decrease in the operative time and hospital stay without wound infection. For these reasons, SPLAP remains our procedure of choice for IHPS.^[4] Another encountered problem was the exteriorization of the hypertrophic pylorus through the CU incision but after the right learning curve we resolve it.

In the last 20 years with the widespread use of laparoscopic techniques, laparoscopic approach for IHPS increased their application. We agree with Zakaria that different results reported by some reports supporting laparoscopic or CU approaches, respectively, need final answers from further randomized controlled trials, and only in this case, countries

with a challenged resource settings may enter the laparoscopic era for pyloromyotomy. However, we must assume that the same instrumentation adopted for pyloromyotomy can be reused for other interventions.^[5]

In conclusion to introduce countries with poor resources to laparoscopic interventions, a deep analysis must be performed regarding many topics such as the training of surgeons for these techniques; which kind of interventions should be performed; if the change to laparoscopy may give advantages to patients; if this change can give advantages in term of costs considering that the minimally invasive surgery should give shorter hospital stay; and comparing this saving with spending for a new and more expensive instrumentation. It should take a broader scheme of any positive or negative factor not just relying on the analysis of randomized controlled trials of a single intervention.

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Conflicts of interest

There are no conflicts of interest.

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