International Journal of Surgery 68 (2019) 183–184

Contents lists available at ScienceDirect

International Journal of Surgery

journal homepage: www.elsevier.com/locate/ijsu

Editorial

Editor's perspectives – August 2019

A non-invasive procedure is a procedure that does not require incision into the body or the removal of tissue [1]. Several areas of non-invasive surgery have developed into clinical use. The best example is the use of extracorporeal shock wave lithotripsy (ESWL) in the treatment of urinary tract stones. ESWL was first introduced in the early 1980s. More than 30 years have elapsed since its introduction, and it is still the first line treatment for more than half of all urinary tract stones [2]. Machines and treatment strategies have significantly developed over time. However, four components remain essential and can be found in all modern machines regardless of the manufacturer: the shock wave generator, a mechanism to focus the shock wave onto a target, a system for stone(s) location and a coupling medium [3].

During the procedure, the patient lies in a coupling medium, usually in the form of a water-filled cushion. The stone is located using X-rays or ultrasound. High energy sound waves are then generated by the machine called a lithotripter. The waves then pass through the patient's body without injuring it, and the stone is broken into small pieces which are then passed through the urinary tract out of the patient's body.

ESWL works best for renal stones in the kidneys, or in the parts of the ureters close to the kidneys.

The use of ESWL for stones in other organs will be discussed in the future perspectives of this Journal.

In this August issue, there is a Perspective written by Khan OA on "The myths of obesity". This is a very interesting article to go through and I recommend this article to all readers of our Journal.

As usual, the August issue is full of systematic reviews ± meta-analyses. The systematic review and meta-analysis on "Comparison of totally laparoscopic total gastrectomy and laparoscopic-assisted total gastrectomy" concluded that the former procedure was as safe as the latter procedure but it resulted in better cosmesis, lower invasiveness and faster recovery. Another systematic review and meta-analysis on a relatively related topic on "Splenectomy in gastrectomy for gastric carcinoma" concluded that splenectomy increased postoperative complications without significantly improving long-term prognosis of patients. The third systematic review and meta-analysis looked at whether "Endoscopic loop ties are safe even in complicated acute appendicitis". This study defined complicated acute appendicitis as gangrenous, necrotic or perforated appendicitis. The study concluded that in laparoscopic appendectomy for complicated appendicitis, the use of an endostapler or an endoscopic loop tie for stump closure did not affect perioperative outcomes. The fourth systematic review and meta-analysis on "Delayed versus standard ligature of the dorsal venous complex during laparoscopic radical prostatectomy" concluded that both the two approaches were safe and resulted in similar urinary control rates. However, the delayed approach significantly decreased the positive apical margin rate. The fifth systematic review and meta-analysis compared "Early versus delayed surgery to treat proximal femoral fractures in elderly patients" and concluded that early surgery significantly reduced mortality and postoperative complications when compared with delayed surgery. The sixth meta-analysis on randomized controlled trials compared "Intra-articular and subacromial corticosteroid injection in frozen shoulder". The study concluded that the former treatment resulted in improved pain relief compared with the latter treatment, while there were no significant differences on shoulder function or adverse effects.

A network meta-analysis which compared "DJ stented, external stented and stent-less procedures for pediatric pyeloplasty" demonstrated no significant differences in operative time, operative success, hospital stay, improvement in renal functions and overall complication rates among the 3 procedures. On ranking, the DJ stented procedure seemed to be the most beneficial procedure.

Of the 3 systematic reviews, the first review asked the question "Is implantation of autologous chondrocytes superior to microfracture for anticular-cartilage defects of the knee?". The study concluded that knees treated with the modified versions of autologous chondrocytes implantation (ACI-C) or matrix-applied chondrocyte implantation (MACI) significantly improved outcomes at a mid-term follow-up of 5 years compared with those treated using microfracture. The second systematic review on "Contralateral processus closure to prevent metachronous inguinal hernia" concluded that prophylactic closure significantly reduced the number of metachronous inguinal hernia. However, about 18 prophylactic procedures were required to prevent one metachronous inguinal hernia. The third systematic review looked at the potential application of the use of ultrasound as an adjunct for tube thoracostomy in reducing procedure-related complications. The review concluded that there were potential benefits to incorporate ultrasonography in tube thoracostomies.

There are 3 comparative studies. A randomized controlled trial comparing the "Effect of enhanced recovery after surgery (ERAS) pathway on the postoperative outcomes of elbow arthrolysis". The study concluded that the ERAS pathway resulted in significant improvements in levels of pain (at rest and in motion) and range of motion without any increase in postoperative complication rates. The second randomized controlled trial compared "Ultrasound-guided paravertebral nerve block and subarachnoid block for elderly male patients under unilateral-opened inguinal hernia repair operation". The study showed the former procedure to be better. The third comparative study is a case-controlled study for "A new method for diagnosis of anterior cruciate ligament tear using MRI with maximum flexure of knee in the prone position". The results showed MRI with maximum knee flexure in the prone position correlated better than MRI in the supine position with arthroscopic operative findings.

Of the original researches, there is a cross-sectional study on the

https://doi.org/10.1016/j.ijsu.2019.07.030

Available online 26 July 2019

impact of training in the SHARE communication course by physicians on the signing of do-not-resuscitate orders for critical patients in the emergency room, a prospective stage 2A development IDEAL (Idea, Development, Exploration, Assessment and Long-term monitoring) case series on the use of selective devascularization treatment for large hepatocellular carcinoma, a 16-year cohort study on the risk factors of second surgery for adjacent segment disease following cervical discectomy and fusion, a 7-day prospective study on Nigerian surgical outcomes with external validation of the African surgical outcomes study using the surgical risk calculator, a retrospective study on the impact of surgical routes and learning curve of radical hysterectomy on survival outcomes for stage 1B cervical cancer, and a retrospective multicenter study on the surgical management and outcome of grade-C pancreatic fistula after pancreaticoduodenectomy.

Finally there are 3 Letters to the Editor. The first letter is uninvited but it covered a very interesting topic: “How well is the NHS set up for issues surrounding gender identity?” The second letter is a letter commenting on the “Risk factors and complications contributing to mortality in elderly patients with fall-induced femoral fracture: A cross-sectional analysis based on trauma registry data of 2407 patients” which has previously been published in our Journal. The third letter is a reply to this Letter.

This perspective for the August 2019 issue is long. The main reason being that this August issue of the International Journal of Surgery is so full of excellent articles which I would like to recommend to our readers. Please go through those articles which are relevant to your clinical practice, and enjoy reading those articles which appeal to you.

References

[1] https://www.spine-health.com/glossary/non-invasive-procedure.
[2] C. Bach, T. Karaolides, N. Buchholz, Extracorporeal shock wave lithotripsy: what is new? Arab J. Urol. 10 (3) (2012) 289–295.
[3] A.Z. Weizer, P. Zhong, G.M. Preminger, New concepts in shock wave lithotropsy, Urol. Clin. N. Am. 34 (3) (2007) 375–382.

Joseph W.Y. Lau
Academician of the Chinese Academy of Sciences, Choh-Ming Li Research Professor of Surgery, Faculty of Medicine, The Chinese University of Hong Kong, Hong Kong, China
E-mail address: josephlau@cuhk.edu.hk.