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## Letter to Editor

# Inguinal Hernia Repair

authors concluded that mesh tolerance was adequate in vast the majority of patients, who had a reduced postoperative stay and an immediate return to normal physical activities [1]. They commented studies with 30% of chronic local pains and 15% of hernia recurrences and considered promisor the results of this initial experiment utilizing highly absorbable mesh [1]. More research to validate this anterior tension-free hernia repair with the mesh was suggested.

In this scenery, comments on a Brazilian review about the time away from work for the recovery of patients undergoing inguinal hernioplasty by conventional technique with or without synthetic prosthesis, compared with those treated by laparoscopic herniorrhaphy [2]. The Shouldice technic was the comparative standard for 882 cases of open herniorrhaphy without prosthesis, and the mean weighted days (mean) of withdrawal from work was 20.7 days. The mean was 19.5 days in 855 patients with open herniorrhaphy and prosthesis; whereas the mean was 12.6 days in 1250 patients treated with laparoscopic herniorrhaphy [2]. Hence, the maximum time of withdrawal from work was 21 days for all the techniques [2]. The data indicated that patients who undergone laparoscopic surgery needed 30% shorter period to return working compared to the patients submitted to conventional techniques [2]. Surgery of Shouldice can be done with local anesthesia, and has recurrence rate of 1%; the technic of Lichtenstein is performed with local anesthesia and the recurrence rate is 0.2%; general anesthesia is needed for laparoscopic herniorrhaphy, which has 1.5% of recidives [2]. The laparoscopic procedures may be herniorrhaphy totally extraperitoneal or transabdominal preperitoneal have higher cost, but allow correction of bilateral hernias by the same route [2]. The authors concluded that the choice of best technique for herniorrhaphy is not consensual, and are in accordance with further comparative studies including laparoscopic herniorrhaphy.

Worthy of note are the data of recent evaluation of matrix metalloproteinases (MMPs) and their tissue inhibitors (TIMPs) in patients with indirect, direct, and bilateral inguinal hernias [3]. There were increased levels of MMPs and decreased levels of TIMPs in all the groups, phenomenon suggesting that hernia is due to a systemic disorder more significant in bilateral defects [3].

## Dear Editor

Inguinal hernia is a common condition with great number of referrals from primary health care to general surgeons, and the treatment is corrective surgery in practically all cases [1,2]. The options include open or laparoscopic approaches, absorbable or non-absorbable meshes, and the major complications have been the local chronic pain and the recurrence of hernia [1]. These main concerns about complications of open hernia repair are related to inadequate mesh dimension or position, and foreign body inflammatory reaction to material of the meshes [1]. Moreover, this surgical entity is one of main causes of absenteeism due to health problem [2].

We read with special interest the Research Article done by Simone M et al. about "a new chance for open inguinal hernia repair", which was recently published in this Journal [1]. They retrospectively analyzed data obtained during 18 months from 710 surgical patients; and 85.45% were men with mean age of 51.8% whereas the mean age of women was 62 years [1]. The purpose was to evaluate a partially absorbable (90% poly-L-lactic acid) mesh that can elicit less intense foreign body reaction, with reduced local inflammatory phenomena [1]. Exclusively unilateral hernias were treated and spinal anesthesia was utilized in all cases [1]. Two groups were compared in relation to the use of the dome and the onlay mesh (86.36%) and exclusive utilization of the dome (13.66%) for the procedure of inguinal hernia repair [1]. The mean operative time was 45 minutes, with mean time of discharge of 12 hours. Main complications were chronic inguinal pain in 0.42% and recurrent hernia in 0.70% of cases [1]. The

## Authors' contributions

VMS conceived the intellectual content of the manuscript, participated in its design and coordination, and helped to draft the manuscript. LAM contributed to conception and design, and interpretation of data from the references. Both authors read and approved the final text, and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work were appropriately investigated and resolved.

## References

1. Simone M, Grasso E, Cianci V (2016) Retrospective Study of 710 Patients Treated with 4ddome® Mesh: A New Chance for Open Inguinal Hernia Repair. *J Surg Surgical Res* 2: 043-047. [Link: https://goo.gl/1NTzGk](https://goo.gl/1NTzGk)
2. Mello DACPG, Furtado WS, Santos VM, Schroff WLA, Oliveira Junior WP (2014) Return to work activities after conventional inguinal hernia repair with prosthesis or not, and by laparoscopy. *Brasília Med* 50: 222-228. [Link: https://goo.gl/XfyT7h](https://goo.gl/XfyT7h)
3. Isik A, Gursul C, Peker K, Aydın M, Firat D, et al. (2017) Metalloproteinases and their Inhibitors in patients with inguinal hernia. *World J Surg*. [Link: https://goo.gl/BFttI6](https://goo.gl/BFttI6)