



## Invited Commentary

## An invited commentary on “Diathermy versus scalpel for skin incision in patients undergoing open inguinal hernia repair: A systematic review and meta-analysis” (Int J Surg 2020; 75:35–43)



## ARTICLE INFO

## Keywords:

Diathermy

Scalpel

Skin Incision

Inguinal Hernia

Pain

Hematoma

## Dear Editor,

I gratefully acknowledge the International Journal of Surgery for inviting me to comment on this interesting review of the literature by Mr. Shahab Hajibandeh, Mr. Shahin Hajibandeh, and Mr. Andrew Maw on the different methods of skin incision for inguinal hernia treatment. I congratulate them for their work [1].

The role of diathermy or scalpel incision concerns only the skin and its consequences are limited to superficial inflammation [2]. Bleedings, seromas and infections are due to technical reasons. According to the authors, the use of diathermy for skin incision was associated with a lower risk of hematoma. It is worth to emphasize that hematomas occur when hemostasis is not adequate or the patient presents with hematological disorders. Seroma occurs if the subcutaneous tissue is not approximated, leaving an empty space, which is then filled with serum. Meta-analysis of observational studies showed no significant differences between diathermy and scalpel in causing surgical site infection. Usually this complication starts in the subcutaneous plane due to inadequate skin cleaning or poor surgical techniques, but not to the surgical devices used [3].

Diathermy and modern scalpels have been used since the 19th century with similar results. This outstanding article concludes that the use of diathermy for skin incision was associated with a shorter incision time [1], even considering a five-centimeter-skin-incision can be performed within a few seconds. Post-operative pain is always difficult to classify and to identify whether it originates in the skin or deeper in the wound [4]. Nevertheless, it is better to avoid diathermy in patients with a risk of developing keloids.

A pivotal aspect to be considered is the direction of inguinal incision. Following the Bassini reports, majority of surgeons prefer the oblique inguinal incision based on the direction of inguinal ligament [5]. However, this is a mistake, given that the upper portion of that incision is never used, as it is located outside of the inguinal canal, which is more transverse than oblique. The oblique incision does not follow the line of skin tension and results in painful, scars, with more

frequent development of hypertrophy scars and keloids.

The inguinal transverse incision permits an easy access to the inguinal canal with an adequate view of its posterior wall, as well as the internal inguinal and femoral rings for a safe and correct treatment of inguinal and femoral hernias. This incision follows the line of skin tension, is less painful and can be covered by pubic hair with better aesthetic results and less scar formation [6]. Studies on inguinal skin incisions should take into account their direction, which may be related to adversities.

## Provenance and peer review

Invited Commentary, internally reviewed.

## Declaration of competing interest

The author declares no conflict of interest related to this study and its publication.

## ACKNOWLEDGMENTS

The authors gratefully thank the Research Support Foundation of the State of Minas Gerais (FAPEMIG) and the National Council for Scientific and Technological Development (CNPq).

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DOI of original article: <https://doi.org/10.1016/j.ijss.2020.01.020>

<https://doi.org/10.1016/j.ijss.2020.02.026>

Received 30 January 2020; Received in revised form 7 February 2020; Accepted 17 February 2020

Available online 25 February 2020

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