

A case review of De Garengeot's hernia

Jorge Eduardo Escobedo Arriazola¹, Myrna Lizeth Cuevas Meléndez², Veronica Rubio Anaya³

^{1,2,3} Hospital general regional 6 IMMS CD. Madero Tamaulipas

ABSTRACT

De Garengeot's hernia was described in 1731, referring to it as the presence of the appendix in a femoral hernia. It occurs in between 0.5% and 5% of cases. It is believed to perform simple hernia surgery and avoid using mesh if there is infection or inflammation. Laparoscopic surgery should be considered in patients who are clinically stable and have a preoperative diagnosis. In this case, we are dealing with a patient who has a hernia caused by Garengeot's syndrome.

ARTICLE DETAILS

Published On:
18 October 2022

Available on:
<https://ijmscr.org/>

INTRODUCTION

Femoral hernia is the protrusion of the sac through the femoral triangle, below the ligament, and in 50 percent instances, it results in imprisonment. Three of all hernias are femoral hernias. The French surgeon Rene Jacques de Garengeot initially identified De Garengeot's hernia in 1731, referring to it as the presence of the excursus in a femoral hernia. In contrast to a femoral hernia with appendicitis, this miracle happens in 0.5% to 5% of cases with femoral hernias.¹⁻⁵

CASE REPORT

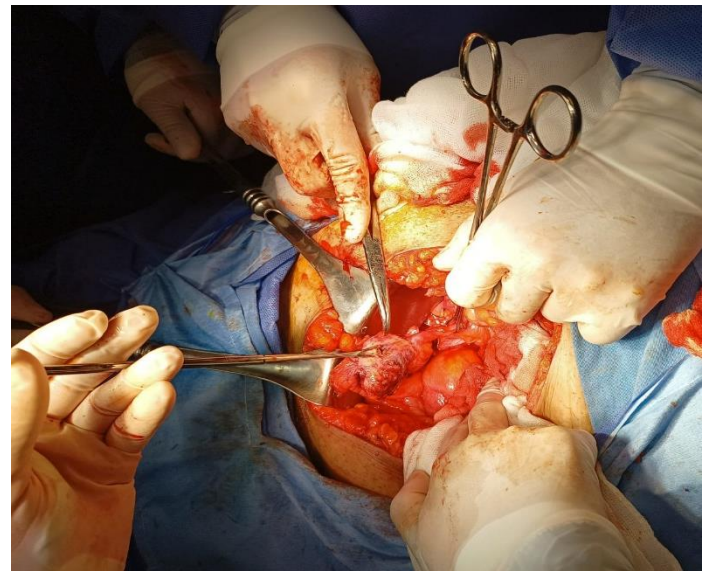
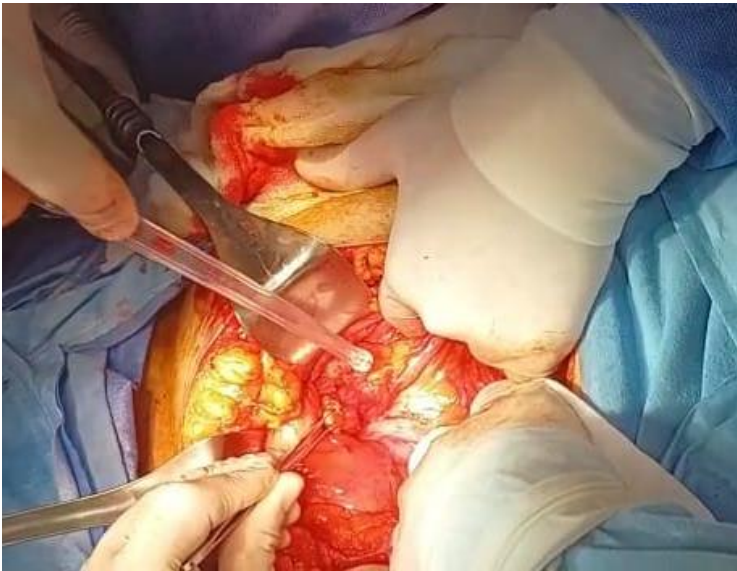
In the general hospital of zone no. 6 of the Mexican Institute of Social Security, a 31-year-old male patient with a history of diabetes mellitus treated with metformin and glibenclamide. Acute to medical emergencies for abdominal pain of two weeks of evolution which decreased in intensity with exacerbation 4 days prior to his admission, referring to it badly located, with predominance in the right iliac fossa, accompanied by a fever of 37.8 C and vomiting on one occasion. On remarkable physical examination, pain was found at the McBurney point, signet rovsing present, borborygmi not present. I present an increase in the leukocyte count of 20.1 K / uL, abdominal ultrasound reported an abscess-like tumor in the right iliac fossa of 81 mm by 71 mm by 55 mm, without being able to visualize cecal appendix. Decision was made of exploratory laparotomy where cecal appendix is found towards hernial defect below the inguinal ligament, to the reduction with perforation in its distal and fecalite third of 2x1 cm, histopathological study reports cecal appendix of 9.5 cm surrounded by abundant adipose tissue with multiple purulent fibrino plaques, with obstruction of the appendix lumen dicular by fecalites of 1.7 cm in length. An appendectomy was performed with Parker-kerr type

Stump handling. The defect was repaired with non-absorbable suture. The patient had a satisfactory evolution, being discharged on the 3rd day of hospital stay.

DISCUSSION

Two theories have been put out as potential causes of De Garengeot's hernias: the first suggests that the cecum is in an aberrant anatomical position, while the second contends that the cecum is being forced into the pelvis by an overinflated cecum. The threat factors include an increase in intra-abdominal pressure, smoking, aging, and diseases of the connective tissue. Since outward contraction, as opposed to internal contraction in the more prevalent etiology of appendicitis, is created by the narrowing of the neck of the femoral hernia disfigurement in cases like these, the hypothesis of appendicitis is validated. Clinically, the right groin area typically exhibits an unretractable excrescence. Despite having the opportunity in three of the situations to hide pain. Fever or intestinal inhibition rarely occur.⁵⁻⁷ While ultrasonography can be employed in situations involving adolescents or pregnant women, abdominal X-rays are non-specific but can be used to rule out bowel obstruction. CT, however, has 100% perceptivity and 98.9% particularity in identifying acute appendicitis and fetal sequelae. A preoperative opinion can be provided by CT, which is also the preferred method for differentiating between an Amyand hernia and a De Garengeot hernia.¹⁻⁴

The appendectomy and hernia damage repair will likely be done during the final treatment. It is valued for performing straightforward herniorrhagic procedures and avoiding mesh in cases of infection or inflammation. As soon as a preoperative opinion is obtained, the laparoscopic method should be taken into consideration in clinically stable cases.^{8,9}



REFERENCES

- I. S. Linder, G. Linder, C. Månsson. Treatment of de Garengeot's hernia: a meta-analysis, November 2018, <https://doi.org/10.1007/s10029-018-1862-5>
- II. Shareefa Abdulghaffar, MD, Muna Almulla, MD, Priyank Gupta, MD, Ahmed Bedair Mohamed, MD, CT and Ultrasound findings in a case of De Garengeot's hernia: A case report , Rashid Hospital, Dubai,UAE, <https://doi.org/10.1016/j.radcr.2019.03.018>
- III. Christopher S. Thomas, MD, Ahmed Allawi, MD, and Katherine A. Morgan, MD. De Garengeot Hernia Containing Acute Appendicitis and Carcinoid Tumor, *The American Surgeon* 2020, Vol. 0(0) 1–2. DOI: 10.1177/0003134820953786
- IV. Muhammad F. Rosley, MB, BCh, BAO Jennie Gu, MBBS Amelia Russell, MBBS Martin Wullschleger, PhD, FRACS Bhavik Patel, MPhil (Research), De Garengeot hernia: revisited FRACS Acute Care Surgical Unit, Gold Coast University Hospital, doi: 10.1111/ans.15176
- V. Davek Sharma, Jacob Katsnelson, Emmanuel Nwachuku, Jeffrey Kolff The De Garengeot hernia: A case report of an unusual presentation of appendicitis *International Journal of Surgery Case Reports* 76 (2020) 46–48 <https://doi.org/10.1016/j.ijscr.2020.08.053>
- VI. De Garengeot hernia: a systematic review Timothy M. Guenther^{1,2} · Christina M. Theodorou¹ · Nalani L. Grace³ · Tanya N. Rinderknecht, James E. Wiedeman August 2020
- VII. Springer Nature 2020 *Surgical Endoscopy* <https://doi.org/10.1007/s00464-020-07934-5>
- VIII. K.S. Freeman, M.M. Picard, M.D. Kovacs, Acute appendicitis involving a De Garengeot hernia, *J. Comput. Assist. Tomogr.* 42 (September/October
- IX. E.P. Misiakos, A. Paspala, A. Prodromidou, N. Machairas, V. Domi, N. Koliakos, T.Karatzas, N. Zavras, A. Machairas, De Garengeot's hernia: report of a raresurgical emergency and review of the literature, *Front. Surg.* 5 (February)(2018) 12, <http://dx.doi.org/10.3389/fsurg.2018.00012>.
- X. F.S. Fousekis, P.A. Christou, S. Gkogkos, P. Aggeli, G. Pappas-Gogos, A case of DeGarengeot's hernia with acute appendicitis and literature review, *Int. J. Surg. Case Rep.* 49(2018)55-57, <http://dx.doi.org/10.1016/j.ijscr.2018.06.007>, Epub2018 Jun 23.