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Case Report

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Tubulovillous adenoma as a histopathological finding in a hemorrhoidectomy product

Overview

Hemorroids are normal vascular structures on the anal canal that affects from 4% to 10% of the general population. The conservative treatment tends to be effective, however in some cases it is required to refer to surgery. Recently, they have started to apply new technological resources like LigaSure, that offers a surgery that is simpler, faster and with less bleeding. The colorectal carcinoma is developed through different molecular pathways, the adenoma is considered the initial injury for the adenoma-carcinoma pathway. We present the case of a patient who has been treated for a hemorrhoidal disease with histopathological findings of tubulovillous adenoma on a low-grade.

Keywords: tubulovillous adenoma, hemorrhoids, LigaSure

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Rogelio Zayas-Bórquez,[1] Cheryl Z. Diaz-Barrientos,[2] Fernando Navarro-Tovar,[1] Elias Ballesteros-Suarez,[1] Delfino Castro-Alducin,[1] Jose M. Gonzalez-Romero,[1] Mildred Phillipe-Ponce,[1] Samuel R. Medina-Parra,[1] Yoselin J. Sarabia-Pérez[1]

[1]Department of general surgery of Hospital Universitario de puebla, Benemérita Universidad Autónoma de Puebla, Mexico
[2]Department of Coloproctology of Hospital Universitario de puebla, Benemérita Universidad Autónoma de Puebla, Mexico

Correspondence: Rogelio Zayas Bórquez, Department of general surgery of Hospital Universitario de puebla, Benemérita Universidad Autónoma de Puebla, Camino Real Cipreses 1404 Int 6 3, San Andres Cholula, Puebla de Zaragoza, Mexico CP 72810, Email Rogeliozb94@Gmail.com

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Introduction

Hemorrhoids are normal vascular structures on the anal canal, their function is to mantain the anal continence during the non-bowel movement periods. Congestion and prolapse of the hemorrhoidal package leads to hemorrhoidal disease that affects from 4% to 10% of the general population. The treatment in most of the patients is conservative and the surgical excision is highly effective to treat the symptomatic forms. Grade III and IV hemorrhoids, are the ones that are prefered to treat surgically.[1]

The colorectal carcinoma is developed through different molecular pathways with the adenoma-carcinoma relation; this imbalance explains the molecular pathogenesis of most colorectal cancer. The adenomas are considered the initial advanced injury on the adenoma-carcinoma pathway, the tubulovillous adenoma with a prominent serrated architecture, is the cause of a diagnosis confusion.[2] Recently they have started to apply new technological resources like LigaSure that offers a surgery that is simpler, faster and with less bleeding.[3] Next, we will be showing the case of a patient that has been put into a hemorrhoidectomy for a grade III hemorrhoidal disease, in which the pathology test reports a tubulovillous adenoma with low-grade dysplasia.

Case profile

This is a 65 years old female with a history on hypertension, peripheral venous insufficiency, irritant colitis, diverticular disease and repaired umbilical hernia; who has a coloproctology visit describing transrectal bleeding with bowel movement as well as pain and a mass sensation on the anal area. She is examined and diagnosed with a grade III hemorrhoidal disease and it is treated in conservative way. However, because of the failure of the treatment, she is scheduled for an open hemorrhoidectomy with LigaSure. The paraclinical studies show regular parameters during the procedure, where they find lateral hemorrhoid packages and former left engorged, big, with unpolished zones, right lateral mucosal papilla of 1 centimeter; sectioned hemorrhoidal packages and mucosal papilla are sent to pathology.

Pathology reports a tubulovillous adenoma hemorrhoidal tissue sample with low-grade dysplasia as well as external hemorrhoids. Subsequent to the pathology report, a colonoscopy is performed as a protocol and the findings are diverticulitis and rectal varicose veins, without evidence of adenomas (Figure 1).

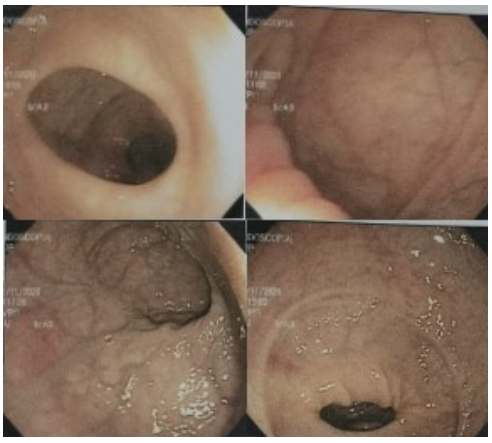

Figure 1 Diagnostic colonoscopy after histopathological findings, which does not show suggestive data about abnormal growths in other colon areas.

Deliberation

We have previously presented a rare case in which findings on pathology, subsequent to a hemorrhoidectomy, reports a tubulovillous adenoma; wherein we have limited information. Hemorrhoidal disease is one of the most frequent pathologies in coloproctology visits and one of the most frequent surgeries performed by that specialty. Nepal and cols. reports a case in which they present a low-grade tubulovillous adenoma that extends through the serrated line.

Although in the report it does not prolapse, it presents a precedent about this type of injuries passing the serrated line, that in case of prolapsing and combining a patient with a serious hemorrhoidal disease like in our case, indistinguishable.[4]

Regarding our treatment, we performed open excision with LigaSure Milligan-Morgan technique. Tanaka and cols. on their series of cases reports the use of submucosal dissection endoscopy for low rectal tumors with concomitant hemorrhoids, reporting good results with healing rates higher than 90%,[5] which shows a good therapeutic option in case of a tumor and hemorrhoidal disease diagnostic, previous to the surgical procedure. After sending our samples to the routine pathology service, the question arises. Are we really finding, like in this case, different diagnoses to the presurgical and transurgical?, Lohsiriwat and cols. in 2009 they performed a big study with this regarding in which they took multiple samples, in particular they took 914 products from hemorrhoidectomy, and reported in 13 patients (1.4%), expected abnormalities on this pieces (melanoma, intraepithelial neoplasia). Nevertheless, the authors conclude that it is not necessary to send all the pieces to be analyzed by the pathology service; they suggested individualizing the patient and their risk factors.[6] Another series of cases by Mascagni and cols. In 2020 they reported an incidence of unexpected injuries of 2.15%, they also suggest individualizing the patient. We believe that it would be essential to have a larger and hemorrhoidal disease focused test, to obtain an accurate recommendation and also identify the risk factors in which it would be required to perform a histopathological test.[7]

Colon cancer is the third most common cancer, we see it more each time in young patients, however the most incidence continues to be in elder people. Elkeleny and cols. In 2021 they reported a series of colonoscopies on 200 patients for early colon cancer diagnosis, finding that up to 27% of patients presented polyps. Another of the pathologies found were adenocarcinoma (9%), inflammatory disease and colitis; suggesting the performance of an early colonoscopy on a general basis, for high risk[8] patients. In our case we performed a colonoscopy subsequent to the pathological findings as part of the protocol, we did not find abnormal injuries in such test.

Conclusion

We have previously discussed a patient with a presurgical diagnostic for grade III hemorrhoidal disease with failure on its medical treatment. A hemorrhoidectomy is performed by finding a tubulovillous tumor on the histopathological report. In our case, a diagnostic colonoscopy was performed with the purpose of finding new abnormal growths through the colon. Reviewing the bibliography we have found a lack of articles which are, indirectly, approaching the subject. It would be interesting and required to report new cases of this regarding and also take notice of how in some cases of hemorrhoidal disease with a bad evolution, even with a medical treatment and with high risk patients, it is essential to consider different diagnoses. In our case the surgical treatment will stay the same, as reported on Lohsiriwat and cols. article. However it would be worth even more individualization of the patients with hemorrhoidal disease with the purpose of preventing possible situations of this kind.

Other bibliographies, like the one discussed previously; Tatanka and cols. about their surgical treatment on patients with a previous tumor and hemorrhoidal disease diagnoses, they had the tumor diagnoses prior to the surgical procedure, contrary to our case; and that is why we question if it is needed to perform a colonoscopy with a biopsy sample on patients with hemorrhoidal disease and with risk factors for colon and rectum cancer.

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Conflicts of interest

Denied by the authors.

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