CASE REPORT

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Giant Mushroom-Like Fibroepithelial Anal Polyp Associated with Hemorrhoidal Disease

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ABSTRACT A fibroepithelial anal polyp is a benign mesenchymal tumor that typically develops from the hypertrophic anal papilla in response to anoderm irritation, damage, or infection. Long-term lymph stasis is thought to contribute to the process. It can be single or multiple, and it is usually small. It can sometimes enlarge and cause symptoms like itching and wetness in the anal region, lowering one's quality of life. It is rarely necessary to rely solely on surgical intervention. It is frequently excised as part of other proctological procedures. It is uncommon in the clinic for them to cause intermittent intestinal obstruction and obstruct the anal region. We aimed to present a case that resulted in intermittent subileus attacks, chronic constipation, and surgical intervention.

Keywords: Fibroepithelial; constipation; anal neoplasms; subileus

The anal papillae are pyramidal skin folds that develop from the base of the Morgagni columns and are covered by stratified squamous epithelium. It is slightly white in color and barely perceptible in the absence of inflammation. The papilla enlarges and becomes visible as a result of inflammation and fibrosis. It may hypertrophy toward the rectum as a result of recurrent inflammatory attacks and be confused with a pedunculated adenomatous polyp. It is found at a rate of 45% in proctological examinations for various reasons, and it can grow to advanced dimensions and become fibroepithelial polyps. Fibroepithelial anal polyps are found in approximately 25% of adults, and their frequency increases with age. In adults, about 25% are single, 45% are 2 or 3, and 30% are 4 or more.[1,2] Obesity, hyperinsulinemia, and diabetes mellitus all increase the risk of developing the lesion. Ectodermal modification and hyperplastic response result from inflammation in the anal papillae caused by poor personal hygiene, local disease, or colon dysfunction. Congestion, regional irritation, injury, and infection all contribute to the process.[3] Although they are commonly seen in proctological examinations, they are difficult to detect radiologically.[4] It is intended to present our case, in which we were able to solve a defecation problem through digitization, were diagnosed with a colonoscopic examination, and were treated with surgical excision.

CASE REPORT

Informed consent was obtained from the patient for this case report.

A 61-year-old male patient who had been suffering from constipation for a long time presented with the complaint of occasional difficulty passing gas and stools for the last 5 years. Abdominal examination was normal; a palpable mass lesion was pal-

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pated on rectal examination. Colonoscopy revealed a mass lesion extending to the ampulla recti and thought to originate from the anal canal. The polyp was removed from the anus with the help of an anoscope in the lithotomy position in the operating room (Figure 1). It was excised together with the pack, which was staged as grade 3 and caused hemorrhoidal disease, in the area to which it was attached. The procedure was done with the help of cauterization; the hemorrhoidectomy area was repaired with 4/0 polyglactin 910. The macroscopic examination of the mass revealed that the outer surface was covered with skin tissue, measuring 7.5x5x4 cm in size, gray-pink in color, and soft in consistency. Microscopic examination depicted a polypoid lesion consisting of loose fibrocollagenous stroma surrounded by hyperplastic epidermis. S100, CD34, p16, HMB45, MelanA, EMA, SMA, and ki67 immunohistochemistry staining was performed in order to exclude lesions such as neurofibroma, nevus, and verruca vulgaris, which are in the differential diagnosis. As a result of morphological and immunohistochemical staining, a fibroepithelial anal polyp was shown pathologically (Figure 2). When the hemorrhoidectomy specimen obtained by Ferguson's method was examined, it was reported as a lesion compatible with hemorrhoids consisting of thrombosed, dilated vascular structures with a diameter of 2.5x2.5x1 cm. During the follow-up period, there was no wound problem, proctological complaints regressed, and the patient was able to return to his normal life on the third day.

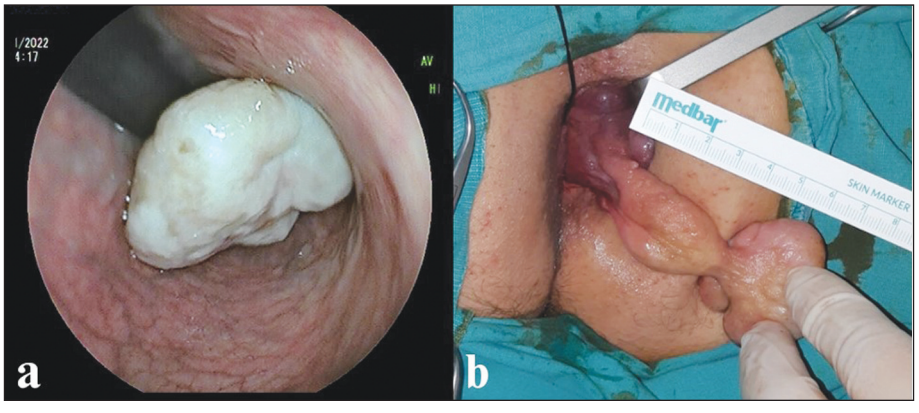

FIGURE 1: The fibroepithelial anal polyp appears in **(a)** colonoscopic examination and **(b)** the hemorrhoidal pouch with the polyp during surgery.

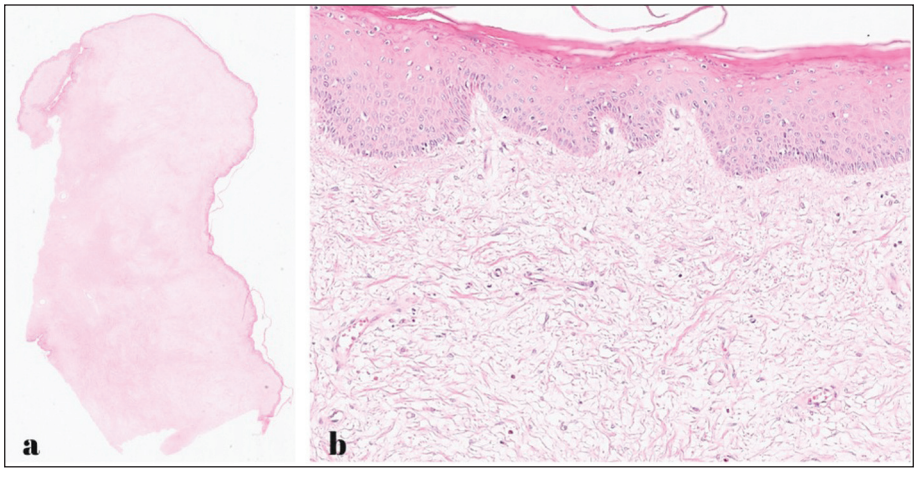

FIGURE 2: Fibroepithelial anal polyp pathological features **(a)** Hematoxylin & Eosin x10, **(b)** Hematoxylin & Eosin x100, fibroepithelial polyp.

DISCUSSION

Fibroepithelial polyps of the anus, also known as hypertrophic anal papillae, are common lesions that have received little attention in the medical literature (Table 1). They are enlarged, benign, polypoid protrusions of the anal squamous epithelium and subepithelial connective tissue distal to the columns of Morgagni. Most anal papillae are 2-5 mm, rarely exceeding 2 cm. In such cases, rectal prolapse, leiomyosarcoma, anorectal carcinoma, and malignant lymphoma are included in the differential diagnosis. The polyp in our case was 75 mm long and was associated with the hemorrhoidal pouch at the level of the dentate line (Figure 1b).

The fibroepithelial anal polyp is prone to trauma during stool passage and may become inflamed. It may cause symptoms by protruding toward the anal inlet during defecation. Sometimes it may need to be repositioned with digital assistance, similar to a rectal prolapse. The main symptoms are itching, foreign body sensations, mucus discharge, a feeling of incomplete emptying of stools, and discomfort when sitting. It is easy to differentiate from an adenomatous polyp endoscopically. The mucosa is white, and the stalked part originates from the squamous epithelium of the dentate line, tissue sampling with biopsy forceps causes pain in the fibroepithelial polyp, and the pathological result is squamous epithelium. Our case involved taking the polyp in the anal canal out of the anus with the help of a finger during defecation, and placing it back into the rectal region after defecation. Colonoscopic examination revealed the presence of a white mass lesion seated in the ampulla recti under the retroversion image (Figure 1a).

Groisman et al. described the pathological features of fibroepithelial anal polyps. Accordingly, mono- and multinuclear cells, sometimes atypical CD34-positive stromal cells, develop fibroblastic and myofibroblastic proliferation, and benign masses are formed as a result of the process.[5] They emphasized that polyps with the presence of atypical cells tend to be large in size. The

TABLE 1: Fibroepithelial anal polyps in reported in the literature.

Author	Publication	Polyp (mm)	Property	Pros
1-Heiken JP, et al. 1984	The hypertrophied anal papilla: recognition on air-contrast barium enema examinations	11, 20, 10	Limitation of radiological imaging	Keeping barium graphy in mind
2-Hizawa K, et al. 2001	Endosonographic demonstration of agiant fibrous polyp of the anus	50	Identification of the features of the lesion with endoscopic US	Contribution of endoscopic US in diagnosis
3-Kusunoki M, et al. 1991	Giant hypertrophied anal papilla. Case report	65	Observation of massive anal bleeding	Involvement in the differential diagnosis of rectal prolapse
4-Thomas C, et al. 2009	Giant fibroepithelial polyp of the anus	90	Demonstration of rapid growth in anal polyp	Emphasizing that the presence of CD34 positive cells is related to growth
5-Galanis I, et al. 2009	Obstructive ileus due to a giant fibroepithelial polyp of theanus	150	Causing ileus	Highlighting CD34, desmin and SMA positivity
6-Tricomi N, et al. 2019	Ring-shaped fibroepithelial polyps of the anus	70, 60	Ring formation of polyps	Emphasizing the potential for polyp growth pattern differences
7-Sogoba S, et al. 2019	Giant anal fibroepithelial polyp during pregnancy: a case study	210	Seen during pregnancy	The polyp contains rich vascularized and myxoid connective tissue; lobulated view
8-Fellegara G, et al. 2020	Anal fibroepithelial polyp with epithelial vascular pseudoinvasion	16	Emphasizing that there may be epithelial vascular pseudo-invasion	For the differential diagnosis, the presence of vascular embolism must be considered
9-Park K, et al. 2022	Giant anal fibroepithelial polyp in a healthy teenage boy: a case report and literature review	150	The polyp has an edematous stroma and multiple enlarged lymphatics, indicating lymphangioma	D2-40 immunostaining effectively demonstrates enlarged lymphatics

US: Ultrasonography.

presence of smooth muscle bundles and hyalinized vascular changes at the base of anal fibroepithelial polyps has been reported. Rectal muscularis mucosa can be found in the upper part of the anal transition region. An increase in the smooth muscle bundles involved here may cause a nucleus to form in the center of the anal fibroepithelial polyps and thus enlarge.[6] Differentiation of diagnoses such as extramammarian Paget's disease or oral white spongiform nevus, which may affect the anal epithelium, should be made carefully.[7]

The fibroepithelial anal polyp in our case is similar to the case of Galanis et al. causing ileus in that it causes intermittent obstruction and causes subileus attacks.[3] Due to the smaller size of the polyp, the presence of a stalked part, and its ability to protrude intermittently out of the anus, it did not require urgent surgical intervention. Tricomi et al. drew attention to the growth formation and emphasized that the polyps in the presented cases had a ring appearance.[8] In our case, the growth formation has the appearance of a mushroom, has a stalked part, and the tip is enlarged. In the studies of Park, Thomas, and Sogoba, polyps reaching an average of 15 cm were presented.[9-11] Hizawa et al. showed homogeneous echogenic submucosal involvement with endoscopic ultrasonography (US) in similar cases and stated that it would be helpful in the differential diagnosis.[12] Fellegara et al. emphasized that epithelial vascular pseudoinvasion can be seen in fibroepithelial anal polyps, and the presence of vascular embolism is valuable in terms of malignancy.[13]

In our case, endoscopic US was not used after colonoscopic imaging. Hemorrhoidectomy was performed at the base of the fibroepithelial anal polyp for an appearance compatible with hemorrhoidal disease thought to be at the third level. It could not be understood whether the hemorrhoidal pacing developed secondary to the polyp or whether it was found simultaneously. The lack of preoperative radiological imaging of the anal region is the shortcoming of our study. Obtaining anatomical information with appropriate contrast and sequence magnetic resonance imaging will guide the intervention.

Fibroepithelial anal polyps in the anal region and occlusive lesions should be on the mind of every surgeon and endoscopist.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: *Sami Açar, Sevil Karabağ;* ***Design:*** *Sami Açar;* ***Control/Supervision:*** *Nurten Türkel Küçükmetin;* ***Data Collection and/or Processing:*** *Can Aydın;* ***Analysis and/or Interpretation:*** *Sami Açar;* ***Literature Review:*** *Hadi Sasani;* ***Writing the Article:*** *Sami Açar, Sevil Karabağ;* ***Critical Review:*** *Nurten Türkel Küçükmetin;* ***References and Fundings:*** *Sami Açar;* ***Materials:*** *Sami Açar, Sevil Karabağ.*

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