Cervical and duodenal polyps and their malignant alterations - case report

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Summary

During routine examination of a 32-year-old patient, a cervical polyp was found and CIN III was confirmed by biopsy. After performing colposcopy, biopsy and establishing CIN III as well as performing gastroscopy where a duodenal polyp was found, thorough diagnostic exams and therapy were carried out. Complete duodenal resection and conization were performed. The medical board decided that neither further radiation nor chemotherapy was needed.

Key words: Cervical cancer; Peutz-Jeghers syndrome; Duodenal polyp.

Introduction

The most common malignant neoplasms of the small bowel are adenocarcinomas, carcinoids, sarcomas and lymphomas in about that order of frequency [1-5, 8, 9]. Rochlin and Longmire [10] called attention to three distinct clinical presentations of patients with malignant small bowel neoplasms: diarrhea with large amounts of mucus and tenesmus; obstruction with nausea, vomiting, and cramping abdominal pain; and chronic blood loss with anemia, weakness, guaiac-positive stools, and occasionally melena or hematochezia. As with benign neoplasms, symptoms of malignant neoplasms are often present for many months before a diagnosis is made, emphasizing their insidious nature [6, 10].

Overall survival for patients with malignant neoplasms of the small bowel is not good. The highest survival rates are reported for duodenal periampullary carcinomas (about 30-40%), whereas adenocarcinomas occurring elsewhere in the small bowel have a 5-year survival of 20% or less [1]. Leiomyosarcoma of the small bowel has a 5-year survival of between 30 and 40% [2]. Radiation and chemotherapy play a small role in the treatment of patients with adenocarcinomas of the small bowel. There may be some improvement in survival when radiation therapy is employed in patients with sarcomas. Determinants of survival for patients with lymphomas include cell type and extent of disease [3]. Radiation therapy and chemotherapy, combined with surgical excision, provide the best survival for patients with lymphomas. Five-year survival has been reported to range between 10 and 50%, with an average of about 30% [9]. Carcinomas constitute about 50% of all malignant tumors of the small bowel in most reported series and are twice as common in men as in women. The average age at diagnosis is 50 years [1]. Adenocarcinomas are more common in the duodenum and proximal jejunum than in the remainder of the small bowel but the reasons for this are unclear. About half of all duodenal carcinomas involve the ampulla of Vater [3].

The location in the small bowel often determines the presenting symptoms. For example, periampullary adenocarcinomas are associated with intermittent jaundice, whereas carcinomas of the jejunum usually produce symptoms of mechanical small bowel obstruction. The presence of jaundice, often intermittent, and a positive stool test for guaiac should immediately call to mind the possibility of a periampullary carcinoma [11]. As with carcinomas arising in other organs, survival of patients with small bowel carcinomas is related to the stage of disease at the time of diagnosis. Diagnosis is often delayed, and disease is often far advanced at the time of operation. The delay in diagnosis is due to a combination of factors, including lack of suspicion because of the relative rarity of the lesions, vagueness of symptoms, and absence of physical findings [12].

Case report

A 32-year-old patient had bleeding during sexual intercourse, frequent infections and a cervical polyp, persisting three years, which was confirmed by colposcopy. Considering the given symptoms, a biopsy and pathohistologic analysis were performed. CIN III was confirmed by biopsy. Other distinct symptoms were of a gastroenterological nature, such as bloating, irregular stools, dyspepsia and eructation, and pain during food intake, which was an indication for gastroscopy. Because of the suspected finding of a possible alternating polyp, surgical intervention was performed. After carrying out colposcopy and biopsy as well as gastroscopy and a duodenal polyp was found, we decided to perform complete diagnoses and therapy. After gastroscopy, removal of the polyp by endoscopy and cervical

Revised manuscript accepted for publication August 9, 2006

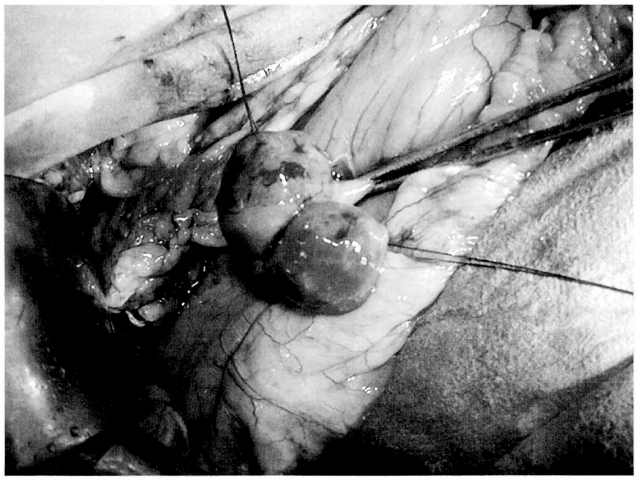

Figure 1. — Duodenal polyp at surgery (Peutz-Jeghers Syndrome).

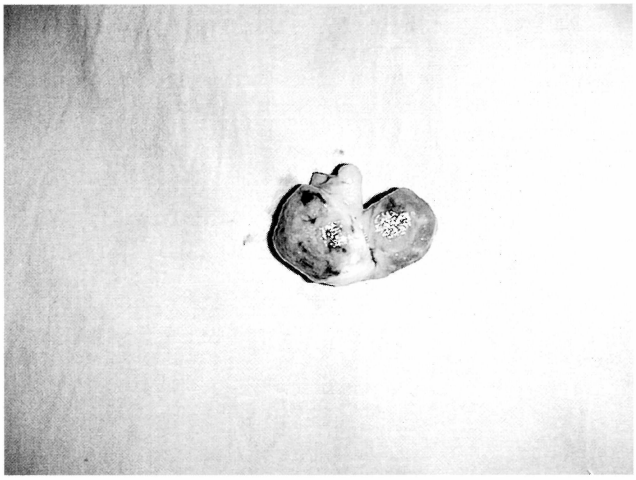

Figure 2. — Resection part.

biopsy, complete gynecological surgery was performed. Complete duodenal resection and conization were performed. The medical board decided that neither further radiation nor chemotherapy was needed. There was no need for radiation of the gynecological segment in relation to the obtained pathohistologic finding after colonization.

The treatment of malignant neoplasms of the small bowel is wide resection, including the regional lymph nodes. This may require radical pancreatoduodenectomy (Whipple operation) for duodenal lesions. Because of the extent of the disease at the time of operation, curative resection may not be possible. Palliative resection should be performed when possible to prevent further complications of bleeding, obstruction, and perforation. If that is not possible, however, bypass of the involved segment is an alternative that may provide worthwhile relief of symptoms. If carried out, the proximal end of the bypassed segment should be brought out as a mucous fistula to prevent development of a closed loop.

Discussion

It is necessary to consider all the symptoms which can be deceptive in the differential diagnosis. Besides an inappropriate hygienic-dietary regime, sociopathies and smoking over 40 cigarettes a day may be possible provoking risk factors. Even with a known mode of inheritance for Peutz-Jeghers syndrome, there was no familial history in our case.

It is an inherited syndrome of mucocutaneous melanotic pigmentation and gastrointestinal polyps. The pattern of inheritance is simple Mendelian dominant, with a high degree of penetrance. A single pleiotropic gene is responsible for both polyps and melanin spots. The classic pigmented lesions are small (1 to 2 mm) with brown or black spots located on the circumoral region of the face, buccal mucosa, forearms, palms of the hands, soles of the feet, the digits and the perianal area. The syndrome was first reported in 1921 by Peutz and in the 1940s redescribed by Jeghers. Multiple pigmented lesions may be noted or only a single buccal lesion may be present. Pigmentation appears in childhood. All cutaneous lesions may fade, leaving only buccal lesions. Polyposis with and without pigmentation have been reported. The entire jejunum and ileum are the most frequent portions of the gastrointestinal tract that are involved with multiple polyps. Fifty percent of patients may, in addition, have rectal and colonic polyps, and one-fourth of patients may have gastric polyps. The chief point to note is that if a patient with multiple rectal, colonic, or gastric polyps is found to have hamartomas rather than adenomas, a search for small bowel polyposis and pigmented lesions should be carried out.

The lesions are not true polyps but are hamartomas and, as such, are not premalignant. However, there have been a few reported cases of malignant tumors of the gastrointestinal tract associated with Peutz-Jeghers syndrome [7]. Some of these adenomatous and carcinomatous changes were noted in hamartomatous polyps. It is not clear, however, whether this represents a coincidence or a true malignant transformation of this syndrome.

The most common symptom is recurrent colicky abdominal pain, due to intermittent intussusception. Lower abdominal pain associated with a palpable mass has been reported to occur in one-third of patients. Hemorrhage occurs less frequently and is most commonly manifested by insidious involvement of anemia. Acute life-threatening hemorrhage is uncommon but may occur.

Conclusion

It is necessary to consider all the symptoms that can be deceptive in the differential diagnosis. Positive family history and possible effects of gene manifestations triggered without specific cause are possible. It is necessary to monitor all polyps considered benign because of their possible malignant alteration. The symptoms that occur may be neglected which is an inadmissible mistake.

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