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## A CASE OF SIMULTANEOUS HEPATIC, SMALL INTESTINAL, AND ADRENAL CAVERNOUS HEMANGIOMAS

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### ABSTRACT

We report a case of multiple cavernous hemangiomas of the liver, small intestine, and left adrenal gland. A 29-year-old woman was found to have multiple hemangiomas of the small intestine during an exploratory laparotomy for acute abdominal pain. After surgery, abdominal CT scans showed multiple hemangiomas in the liver, small intestine, and left adrenal gland. A barium study showed multiple polypoid filling defects in the duodenum, jejunum and ileum, which were hemangiomas.

### INTRODUCTION

Hemangiomas of the gastrointestinal tract are rare; only about 200 cases have been reported in the literature.<sup>1</sup> Many hemangiomas of the bowel are associated with vascular malformations in other regions. We report a patient who had multiple hemangiomas of the liver, small intestine, and left adrenal gland.

### CASE REPORT

A 29-year-old woman had had abdominal pain for 2 days with nausea and vomiting. She did not have a fever. She had been diagnosed as having hemangiomas of the right foot and conjunctiva when she was 7 years old. On physical examination tenderness of the right lower abdomen was noted. She underwent an exploratory laparotomy because acute appendicitis was suspected, but it was not found to be the case. However, multiple hemangiomas were seen scattered throughout the jejunum and ileum. An appendectomy was performed. Afterwards a plain abdominal radiograph taken before surgery was reviewed. Multiple calcifications were seen in the upper abdomen and in the pelvic cavity (Fig. 1).

Precontrast CT scans showed multiple hypodense masses with multiple calcifications in the liver (Fig. 2). Postcontrast CT scans showed nodular enhancement at the periphery of the masses with fill-in on delayed scan (Fig. 3). There were multiple calcifications in the left adrenal gland (Fig. 4). Multiple enhanced intramural masses with calcifications were seen in the terminal ileum (Fig. 5). A barium study showed a few polypoid filling defects in the duodenum (Fig. 6) and multiple polypoid filling defects in the jejunum and terminal ileum (Fig. 7). The patient received symptomatic therapy.

### DISCUSSION

Benign neoplasms of the small intestine are uncommon. In a review of 1721 patients with these, Wilson et al.<sup>2</sup> found 212 patients with hemangioma. The common locations were jejunum and ileum. Preoperative diagnosis of this disease has always been extremely difficult.<sup>3</sup>

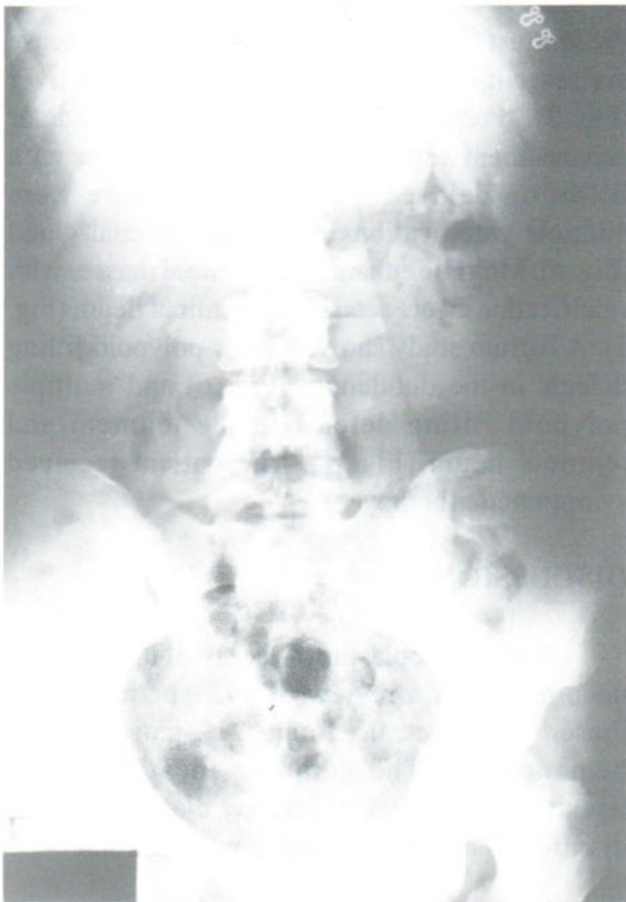
There are four types of gastrointestinal hemangiomas: (i) multiple phlebectasia; (ii)

cavernous hemangioma, either diffuse infiltrating or circumscribed polypoid; (iii) simple capillary hemangioma; and (iv) angiomatosis.<sup>4</sup> Cavernous hemangioma is the most common type. The hemangiomas in our patient contained calcifications, which were phleboliths, so they were the cavernous type. Hemangiomas of the small bowel usually occur with intestinal bleeding that may be chronic or acute. Other clinical manifestations include intussusception, obstruction, and perforation.<sup>1</sup> Our patient had acute abdominal pain.

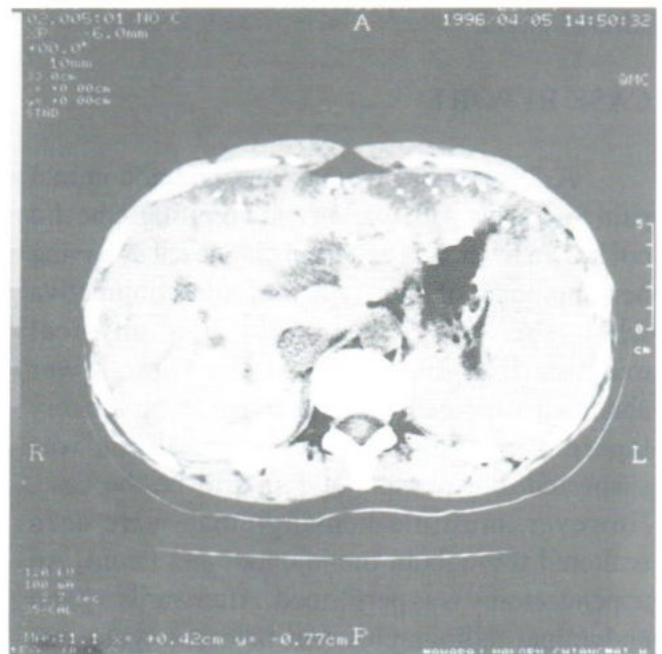
Imaging findings of intestinal cavernous hemangioma have been described. Multiple phleboliths have been seen in plain abdominal radiographs.<sup>4,5</sup> In barium studies multiple polypoid filling defects have been seen.<sup>3,6</sup> In a CT scan of a patient with cavernous hemangiomas of the small

bowel multiple calcifications in the thickened wall of the intestine, were reported.<sup>3</sup> The CT findings were similar to those of our patient.

There are many hemangioma syndromes such as Rendu-Osler-Weber, Sturge-Weber-Dimitri, and Von Hippel-Lindau.<sup>7</sup> Our patient may have had Rendu-Osler-Weber syndrome (hereditary hemorrhagic telangiectasia), which is an autosomal dominant condition that may occur in childhood, but does so usually after puberty. In this syndrome discrete, bright red, spider-like macropapules appear on the face; tongue; lips; nasal, oral, and conjunctival membranes; the palmar aspect of the fingers; the nail beds; liver; lung; spleen; pancreas; brain; and mucosal surfaces.<sup>8</sup>

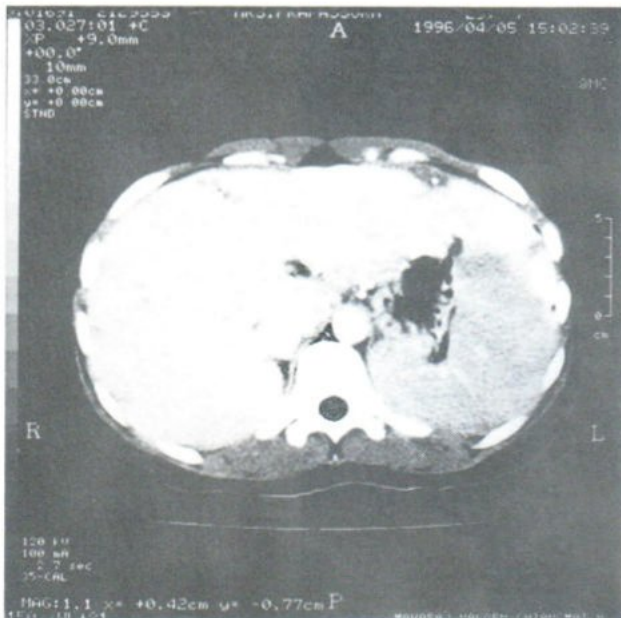


**Fig.1** A plain abdominal radiograph shows multiple calcifications in the upper abdomen and pelvic cavity.

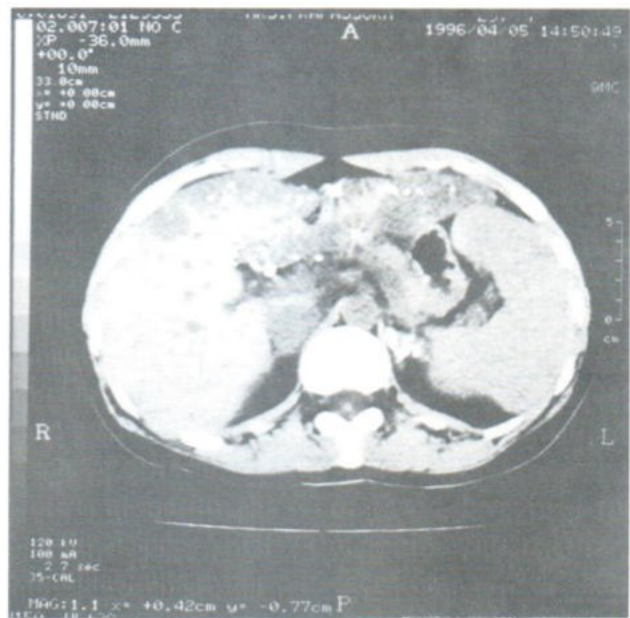


**Fig.2** Precontrast CT scan shows multiple hypodense masses in the liver with calcifications.

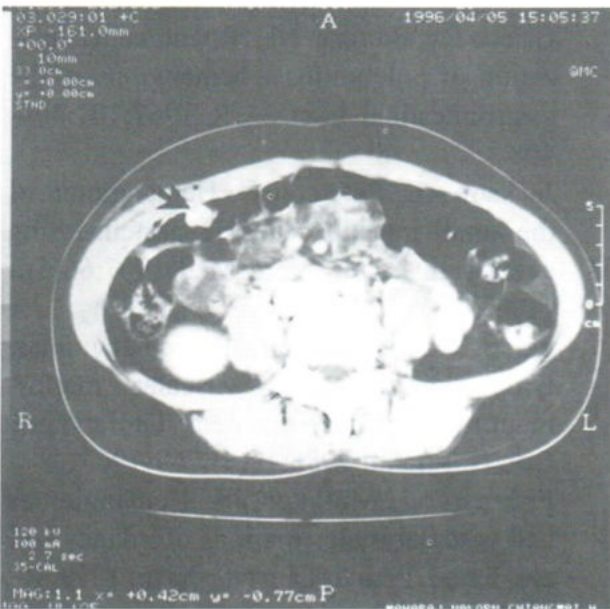




**Fig.3** Delayed CT scan (10 minutes after contrast infusion) shows intense enhancement of multiple masses in the liver with multiple calcifications.



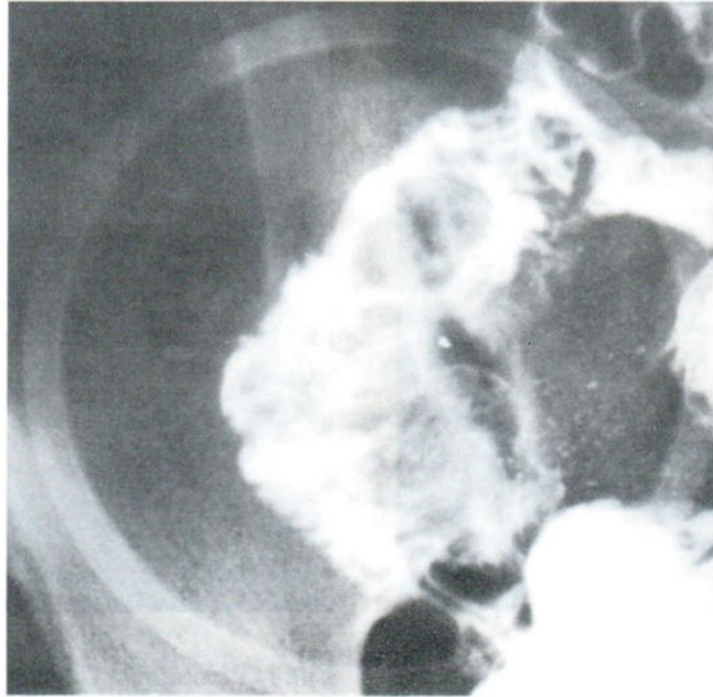
**Fig.4** Precontrast CT scan shows multiple calcifications in the left adrenal region and multiple hypodense masses in the liver with calcifications.



**Fig.5** Postcontrast CT scan shows focal thickening of the ileal wall with calcifications (arrow).



**Fig.6** Barium study shows a few polypoid filling defects in the duodenum (arrows).



**Fig.7** Barium study shows multiple polypoid filling defects in the ileum.

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