Control of Life-threatening Hemorrhage in Cecal Tuberculosis by Transcatheter Embolisation

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Abstract
Torrential hemorrhage is rare in tuberculous affection of the bowel. The traditional method of treatment has been immediate surgical intervention aimed at bowel resection. To our knowledge, this is the first report of successful control of such life-threatening hemorrhage by transcatheter embolisation.

Key words: Cecum, tuberculosis, hemorrhage, transcatheter embolisation

Introduction
Life-threatening hemorrhage in gastrointestinal tuberculosis is rare. We report a case in which such hemorrhage was successfully treated by transcatheter embolisation.

Case Report
A 35 year old male patient was admitted with signs of subacute intestinal obstruction. At an emergency exploratory laparotomy, dense adhesions of multiple small bowel loops were found. Surgical resection was not attempted because of fear of multiple iatrogenic perforations. A small piece of mesentry was excised for histopathological examination and the abdomen closed. Following surgery, the patient improved steadily on conservative treatment.

However, on the 10th post-operative day, he had massive fresh bleeding per rectum, necessitating continuous transfusion of blood. A superior mesenteric angiogram (Fig 1) showed extravasation of contrast in the cecum. In view of the critical condition of the patient, it was decided to embolise the feeding branch of the middle colic artery. This was achieved with injection of 3 ml gel foam mixed in contrast. Satisfactory radiographic control of contrast extravasation was seen on the check angiogram (Fig 2). Immediately following this, the rectal bleeding ceased. There was no untoward effect of embolisation. The patient was discharged in a fit state on the seventh day following embolisation. He was advised anti-tuberculous treatment.

Discussion
Massive hemorrhage in tuberculous enteritis is very rare. In a review of literature, Vimala et al. could gather only 35 such cases. Poznańska2 reported nine additional cases; angiograms of the mesenteric bed were available in only three of them. Since this review in 1985, we have been unable to find any further report.

Bleeding in tuberculous enteritis is believed to be due to erosion of vessels by ulcers. For some reason, this seems to be most common in the cecum. Massive bleeding in tuberculous enteritis has traditionally been treated by resection of the bowel. To our knowledge, transcatheter embolisation as a treatment modality has
not been described so far. Our patient presented with classical angiographic indications for embolisation. We could selectively catheterise the feeding vessel from the middle colic artery and injection of medium sized gel foam in small volumes satisfactorily controlled the hemorrhage.

We recommend that transcatheter embolisation rather than surgery should be the first mode of treating massive gastrointestinal hemorrhage of tuberculous etiology.

References