CASE PRESENTATION

Angiography in Upper Gastrointestinal Bleeding

By Dr. Najeeb Jamsheer*

A PATIENT with significant U.G.I. bleeding presents him/herself as an emergency. The initial management of this life threatening situation may be in the hands of clinicians, surgeons, or both. A team of both is, of course, preferrable. But three quarters of such patients do stop bleeding with conservative management (1, 3) consisting of bed rest, sedation, volume repletion and blood transfusions. If, however :

a. the patient continues to bleed despite conservative measures, (4)

b. endoscopy was not available, difficult to perform, contraindicated or in conclusive, and

c. surgery was contemplated as necessary to control the bleeding,

then angiography must be considered, for in such a situation lies its major contribution, that's to localize the site of the bleeding prior to surgery, (1, 2, 5). Conventional barium studies in acute U.G.I. haemorrhage are often unrewarding for, even if a lesion could be demonstrated, its not a fullproof that its the source of the patient's bleeding. But recently it has been possible to elicit characteristic features of acutely bleeding lesions using the double contrast barium U.G.I. study. (6).

But if angiography was to be effective it must be performed while the patient was actively bleeding, thus the facility must be available 24 hours a day and at short notice. To demonstrate the site of the bleeding the rate of haemorrhage at the time of the procedure must at least be 0.5 cc per minute (2).

A.H.A. is a 65 year old Bahraini male who came to the Accident and Emergency Department of Salmania Medical Centre complaining of epigastric pain associated with dyspneoa, sweating and generalized weakness of a few hours duration. Interrogation revealed that earlier in the day the patient had passed 3 loose motions but no blood.

Physical examination was essentially negative, but his E.C.G. showed minor ST-T segment changes. Admission for observation and investigations was refused. Feeling worse, he returned to the A. and E. Department a few hours later only to suddenly collapse. Immediately he was put in the recumbent position and his recorded B.P. then was 90/60 and later rose to 110/70. While still in the A. and E. Department. P.E. disclosed tachycardia and a grade II/VI systolic murmur in the mitral area. The patient gave no history of drinking or smoking habits. No previous similar episodes. The clinical impression then was that of "acute myocardial infarction". But while in hospital, 30 hours after admission, the patient passed a large melena and later this was associated with diarrheoa and fresh blood in the stool, but no haematemesis.

Nasogastric tubing, however, showed diluted fresh blood in the gastric aspirates. Repeated questioning revealed no history of haematemesis or recent intake of medications and no history of similar episodes.

Conservative treatment failed to control the patient's G.I. bleeding which continued at the rate of 3-4 cc/minute. At this stage surgery was contemplated. As the source of the bleeding was considered to be most likely from the upper G.I. tract, it was thought necessary to start with selective coeliac angiography. This was performed under local anaesthesia using the transfemoral Seldinger technique and

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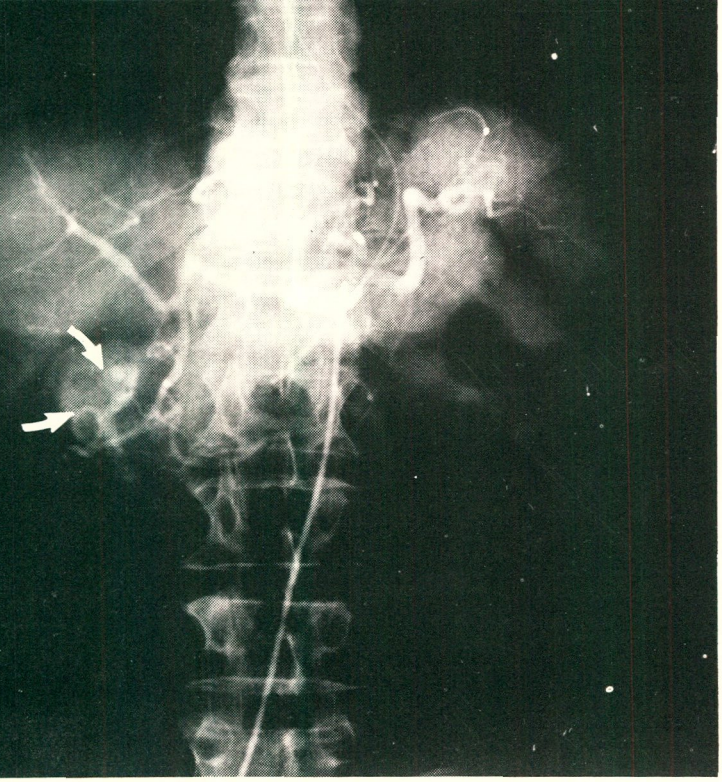

Fig. 1

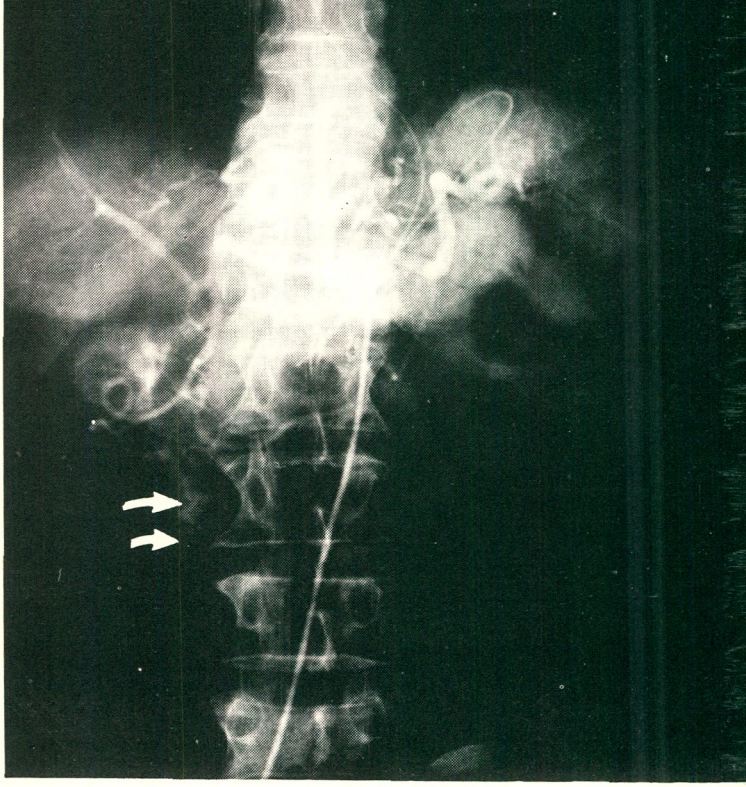

Fig. 2

selective catheterization of the Coeliac Axis. Extra-vasation of contrast medium from the sup. pancreaticoduodenal branch of the gastro-duodenal artery was noted in the arterial phase (Figure 1), and outlining of the mucosa of the duodenum was demonstrated a few seconds later (Figure 2). Immediately after the procedure the patient was transferred to the operating theatre where he was found to be bleeding from a vessel at the base of a 1 x 0.5 cm mucosal ulceration on the superolateral aspect of the lst part of the duodenum. An 'under-running' suture controlled the bleeding; vagotomy and pyloroplasty were also performed at the same setting. (Surgeon Mr. Faisal Al-Moosawi, Consultant Surgeon, S.M.C.). Post-operatively the patient did well and was discharged home in good condition and with no further evidence of G.I. bleeding.

SUMMARY :

A case of massive upper gastro-intestinal haemorrhage due to duodenal ulceration diagnosed by coeliac angiography and successfully treated by surgery is presented.

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