than 7%,[3 4] at the time of diagnosis. The authors note, however, that two patients within the Northern Region Register presented with right sided colonic polyps but no evidence of rectal polyps. Despite this finding, they still advocate rigid or flexible proctosigmoidoscopy as an adequate screening procedure of 'at risk' family members.

We feel it should be emphasised that within this high risk population, a large subset of patients present with 'rectal sparing' at initial diagnosis. As many as 20% of patients with familial adenomatous polyposis present with numerous colonic polyps in the total absence of rectal polyps.[5] Furthermore, invasive colonic carcinoma has been noted in up to 8% of this group, with no evidence of rectal polyposis.[5] This was recently reinforced to ourselves, when a young man presented with invasive colonic carcinoma and extracolonic manifestations of the syndrome, but no macroscopic evidence of polyps on rigid proctosigmoidoscopy. As illustrated in our own experience, we believe that rigid proctosigmoidoscopy is too limited an investigation to adequately screen the colorectal mucosa of these at risk family members, as rigid proctosigmoidoscopy alone has a potential false negative diagnostic rate as high as 20%, which may delay prophylactic colectomy and allow progression to colonic malignancy in screened subjects.

We suggest that first degree relatives identified as carriers of the abnormal familial adenomatous polyposis gene (as detected by haematological screening for linked genetic DNA markers), should be screened every 12 months by flexible sigmoidoscopy as a minimum, and colonoscopy as the ideal; and every 3 years in family members with negative linkage markers. The role of rigid sigmoidoscopy should be confined to regular long term follow up of patients at risk of rectal carcinoma following subtotal colectomy and ileorectal anastomosis.

Screening 'at risk' family members with flexible sigmoidoscopy or colonoscopy will minimise delays in diagnosis of affected subjects, and therefore reduce the incidence of colonic carcinoma within the screened population.

I S TAIT
D J BYRNE
J C FORRESTER
Department of Surgery,
Ninewells Hospital and Medical School,
Dundee DD1 9SY

1 Bulow S. Familial adenomatous polyposis. *Ann Med* 1989; **21**: 299–307.
2 Bulow S. Diagnosis of familial adenomatous polyposis. *World J Surg* 1991; **15**: 41–6.
3 Jarvinen HJ. Epidemiology of familial adenomatous polyposis in Finland: impact of family screening on the colorectal cancer rate and survival. *Gut* 1992; **33**: 357–60.
4 Macrae FA, St John DJ, Muir EP, Penfold JC, Cuthbertson AM. Impact of a hospital-based register on the management of familial adenomatous polyposis. *Med J Aust* 1989; **151**: 552–7.
5 Bess MA, Martin AD, Elveback LR, Moertel CG. Rectal cancer following colectomy for polyposis. *Arch Surg* 1980; **115**: 460–6.

Reply

EDITOR,—We thank Tate *et al* for highlighting the problems of routine screening in familial adenomatous polyposis. We appreciate that there is a definite incidence of rectal sparing in familial adenomatous polyposis although the current experience in the Northern Region Register is not as high as the 20% quoted by Bess *et al*.[1] The two patients with rectal sparing in the Northern Region Register referred to by the authors have now been fully reported.[2]

We nevertheless feel that flexible or rigid proctosigmoidoscopy is an adequate screening procedure for most at risk family members and do not consider colonscopy necessary for all 'at risk' individuals. This more invasive investigation should be reserved for selected patient groups. Those patients who have congenital hypertrophy of the retinal pigment epitheliums and unfavourable DNA markers but have not developed polyps by the late teens or early twenties should have proximal polyposis or carcinoma excluded by colonoscopy. Similarly the small group of patients with established but mild polyposis in whom it is considered desirable to delay colectomy must have colonoscopic surveillance. We feel that this selective usage will minimise the number of patients receiving an investigation, which has a definite associated risk of morbidity and death, at no detriment to their care.

D M BRADBURN
M RHODES
Department of Surgery,
The Medical School,
Framlington Place,
Newcastle upon Tyne NE2 4HH

1 Bess MA, Martin AD, Elveback LR, Moertel CG. Rectal cancer following colectomy for polyposis. *Arch Surg* 1980; 115: 460–6.
2 Bradburn DM, Gunn A, Hastings A, Shepherd NA, Chapman PD, Burn J. Histological detection of microadenomas in familial adenomatous polyposis. *Br J Surg* 1991; **78**: 1394–5.

Bleeding varices in the elderly

EDITOR,—I read with interest the leading article by Triger (*Gut* 1992; **33**: 1009–10) on the management of bleeding oesophageal varices in the elderly. I was surprised that he did not mention transjugular intrahepatic portosystemic shunting (TIPS), a new, minimally invasive interventional radiological technique for the treatment of bleeding varices. A tract is created between the hepatic vein and portal vein and patency is maintained by placement of an expandable metallic stent. The procedure is performed through a 10 French (3·3 mm diameter) sheath sited in the internal jugular vein. Early results using this procedure have been very encouraging.

Unlike surgical portosystemic shunting, TIPS has low procedure related morbidity and mortality. Five patients of the first 59 reported have died in the first thirty days following the procedure; three had Child's Stage C disease and two had sepsis unrelated to the TIPS procedure.[1-5] The oldest patient to undergo a successful TIPS procedure was 78 years old.[2] Encephalopathy following TIPS has been reported in one patient.[3] A recent editorial in the *Lancet* advocates a controlled trial of TIPS *v* injection sclerotherapy for the treatment of bleeding oesophageal varices.[6] All gastroenterologists should be aware of this procedure.

V McDERMOTT
Department of Diagnostic Radiology,
Hospital of the University of Pennsylvania,
3400 Spruce St, Philadelphia, PA 19103,
USA

1 Zemel G, Katzen BT, Becker GJ, Benenati J, Sallee DS. Percutaneous transjugular portosystemic shunt. *JAMA* 1991; **266**: 390–3.
2 Richter GM, Noeldge G, Roessle M, Roeren TH, Kauffman GW, Palmaz JC. Three year results of use of transjugular intrahepatic portosystemic stent shunt. RSNA Abstracts. *Radiology* 1991; **181** (suppl): 99.
3 Roessle M, Noeldge G, Pararnau JM, Haag K, Sellinger M, Wenz W, *et al*. Transjugular intrahepatic portosystemic stent shunt (TIPSS): experience with an improved technique. AASLD Abstracts of Papers. *Hepatology* 1991; **14**: 96A.
4 Ring EJ, Lake JR, Roberts JP, Gordon RL, LaBerge JM, Read AE, *et al*. Using transjugular intrahepatic portosystemic shunts to control variceal bleeding before liver transplantation. *Ann Intern Med* 1992; **116**: 304–9.
5 Chalmers N, Redhead DN, Simpson KJ, Hayes PC. Transjugular intrahepatic portosystemic stent shunt (TIPSS): early clinical experience. *Clin Rad* 1992; **46**: 166–9.
6 Anonymous. Bleeding oesophageal varices: IST, EVL, or TIPS. [Editorial]. *Lancet* 1992; **340**: 515–6.

Reply

EDITOR,—I am grateful to Dr McDermott for drawing attention to my omission of transjugular portosystemic shunting (TIPS) in my editorial. While this technique offers exciting prospects for a new therapeutic approach to variceal haemorrhage, I would urge some caution against its uncritical adoption. Reports to date have been based on relatively limited experience from the few specialist centres and, as McDermott points out, no controlled trials have yet been undertaken to compare it with endoscopic sclerotherapy. It is somewhat naive to describe the technique as being 'minimally invasive'; the procedure frequently takes as long as three hours to perform, and there have been several reports of fatal haemoperitoneum because of traumatic rupture of the portal vein/liver.

Anecdotal reports of TIPS being successfully used in elderly patients should not be taken as evidence that the procedure should be readily adopted as an alternative treatment without careful evaluation. Whereas the elderly should not be denied any form of treatment simply on account of their age, it is equally important to ensure that new therapeutic manoeuvres are adequately assessed before being applied to them.

D R TRIGER
University of Sheffield Medical School,
Beech Hill Road,
Sheffield S10 2RX

NOTES

Liver Disease

The XVIIIth International Update on Liver Disease will be held at the Royal Free Hospital School of Medicine, London from 8–10 July 1993. Further information from Professor Neil McIntyre, University Department of Medicine, Royal Free Hospital, Pond Street, London NW3 2QG. (Tel: 071 794 0500 extn 3969; fax: 071 435 5803.)

Gastrointestinal Motility

The 14th International Symposium on Gastrointestinal Motility will be held on 29 August to 3 September 1993 at Minett, Muskoka, Ontario, Canada. Further information from Dr N E Diamant, Chairman, c/o Mrs Diana Valdez, Symposium Co-ordinator, Toronto Hospital (Western Division), 12–419 McLaughlin Pavilion, 399 Bathurst Street, Toronto, Ontario, Canada, M5T 2S8. Tel: 416 369 5075; fax: 416 369 6204.