PREDICTORS OF REBLEED AND MORTALITY IN PATIENTS WITH NON-VARICEAL UPPER GASTROINTESTINAL BLEED

Sir,

Upper gastrointestinal hemorrhage (UGIH) is a common medical emergency with non-variceal bleeding responsible for 50-70% of cases. (1) Bleeding is self-limiting in 80% patients. (2) To improve outcome in remaining 20% critical patients, identification of predictors of rebleeding and mortality is prudent. (3) A prospective study was performed to identify predictors of rebleeding and mortality in patients with non-variceal gastrointestinal (GI) bleeding.

Included were patients of UGIH with non-variceal source of bleeding on endoscopy. Data including demographic characteristics, haemodynamic parameters at admission, transfusions needed, endoscopic findings and therapies used like adrenaline injection, Argon plasma coagulation, heater probe or sclerotherapy, if needed on endoscopy, duration of hospitalization and need for surgical intervention was collected. Rebleeding was defined as new episode of bleeding during hospitalization after initial control or GI hemorrhage, necessitating surgery. Mortality was defined as death during hospitalization. Bleeding control was defined as normal color stools with stable haemodynamics and haemoglobin (Hb) till discharge. Study end points were death during hospitalization or discharge from hospital after bleeding control. Chi square test and receiver operator characteristic (ROC) curve were used for statistical analysis.

In 102 patients included, male to female ratio was 1.49 (61/41) and mean age was 53.06 (± 17.69). Endoscopic findings were gastric ulcer in 22 (21.5%) patients, duodenal ulcer in 19(18.6%), gastric erosions in 17 (16.7%), gastric growth in 15 (14.7%), esophageal ulcers in 7 (6.9%), Mallory weis tear in 5 (4.9%) patients, duodenal growth in 3, dieulafoy's lesion in 2 patients and no identifiable source in 12 patients. Thirty-two (31.3%) patients needed endoscopic intervention for control of active bleeding.

Seventy-nine (77.4%) patients had uneventful recovery while 3 (2.9%) died due to uncontrolled bleeding. Ten patients (9.8%) had rebleeding, 6 stabilized with pharmacological therapy while 4 got operated. Seven patients had surgery for high risk of rebleeding. Three patients died due to co-morbid conditions. Overall mortality was 5.9%.

Tachycardia (pulse Ž 100/min), hypotension (systolic blood pressure < 100mm of Hg, endoscopic stigmata of recent haemorrhage (SRH) and baseline Hb < 8gm/dl were associated with in-hospital mortality, while tachycardia, hypotension, SRH and more than 3 transfusions during hospitalization predicted rebleeding risk in study patient.

Predictors of rebleeding and mortality identified in this study are simple, easily identifiable clinical parameters, which helped us stratify patients in low and high rebleeding risk categories to plan their management accordingly as was recommended by Non-variceal upper GI bleeding conference.[4]

Department of Gastroenterology and Hepatology, Shaikh Zayed Postgraduate Medical Institute, Lahore.

Correspondence: Dr Shahid Sarwar, 153-D, Muslim Road Jinnah Colony, Samanabad, Lahore. E-mail: drnawalshahid@yahoo.com nawalshahid@hotmail.com

Received November 20, 2006; accepted May 02, 2007.

REFERENCES

1. Marshall JK, Collins SM, Gafni A. Prediction of resource utilization and case cost for acute non-variceal upper gastrointestinal hemorrhage at a Canadian community hospital Am J Gastroenterol 1999; **94**:1841-6.
2. Laine L, Peterson WL. Bleeding peptic ulcer. N Engl J Med 1994; **331**:717-27.
3. Branicki FJ, Coleman SY, Fok PJ, Pritchett CJ, Fan ST, Lai EC, et al. Bleeding peptic ulcer: a prospective evaluation of risk factors for rebleeding and mortality. World J Surg 1990; **14**: 262-9.
4. Barkun A, Bardou M, Marshall JK, Non-variceal Upper GI Bleeding Consensus Conference Groups Consensus recommendations for managing patients with nonvariceal upper gastrointestinal bleeding. Ann Intern Med 2003; **139**: 843-57.

DR. SHAHID SARWAR, DR. AKIF DILSHAD AND DR. SHANDANA TARIQ*
Senior Registrar, Shaikh Zayed Hospital, Lahore
*Senior Registrar, Jinnah Hospital, Lahore.

Sir,

Psychiatric examiners have always loved the stuff on medically-related or organic-based issues in mental health.

WILL FUTURE PSYCHIATRY BE 'ORGANIC-BASED'? EVIDENCES FROM RADIOLOGY CANNOT BE IGNORED

Example bring the queries about the role of radiology in psychiatry. With the passage of time, radiology has been instrumental in bringing forth the organic findings in psychiatric patients which is evidenced by a number of studies. Abiodun,[1] described structural changes on CT in schizophrenia, significant differences in ventricular volume and medial temporal structures on MRI studies in the same condition, functional changes on PET, SPECT and fMRI in depressed patients highlighting the importance radiological studies in psychiatry. Binding characteristics of dopamine receptors and their distribution in neuropsychiatric disorder is fascinating

output of radiological work.[2] PET imaging suggests the possibility of reduced D1 dopamine receptor density in the patch compartment of the basal ganglia in schizophrenia as mentioned by Sedvall et al.[3] Brain imaging is increasingly applied in psychiatry and is likely to teach a great deal about the underlying neural mechanisms in mental illness.[4] With the advancing techniques in radiology, more information is available about structural abnormalities of brain in mental illnesses like schizophrenia, depression, dementia and obsessive-compulsive disorders. Though illness like schizophrenia is still considered as functional but it will not be surprising if it will shift into organic category. With the passage of time, more evidence is coming forth for functional mental illnesses as having some organic based pathology. One wonders whether the future psychiatry will be organic-based. There is a need to keep abreast with latest radiology technologies.

REFERENCES

1. Abiodun OA. Role of radiology in psychiatry: a review. East Afr Med J 2005; **82**: 260-6.
2. Sedvall G. Image processing in psychiatry-a review. Fortschr Neurol Psychiatr 1994; 62 Suppl 1: 39-43.
3. Sedvall G, Pauli S, Karisson P, Farde L, Nordstorm AL, Nyberg S, Halldin C. PET imaging of neuroreceptors in schizophrenia. Eur Neuropsychopharmacol 1995; 5 suppl: 25-30.
4. Andreasen NC. Evaluation of brain imaging techniques in mental illness. Annu Rev Med 1988; **39**: 335-45.

DR. AMIN MUHAMMAD GADIT
Professor of Psychiatry,
Memorial University of Newfoundland,
St. John's NL AI B 3v6,
Canada.
E-mail: amin.muhammad@med. mun.ca

Sir,

I would like to comment on an article by Badruddin AH et al titled 'Hemodynamic effects of terlipressin in patients with bleeding esophageal varices secondary to cirrhosis of liver' that appeared in the JCPSP, Vol 16, December 2006 issue.[1] In this, authors have tried to study the hemodynamic effects of a drug while, at the same time, they were also being transfused whole blood, FFP, platelet concentrates and other colloids and crystalloids solution known to have major hemodynamic effects. No effort was made to measure/eliminate the effect of these confounding factors. There was no measure taken to ensure proper variceal bleeding arrest or achieved as given in various Baveno Consensus Workshops or ABRI calculations.[2-6] There are also serious ethical considerations as only 17.14% of patients were given sclerotherapy/banding, which is a definite procedure to reduce the rebleeding and should have been undertaken within 24 hours of admission in a tertiary care hospital. Without a multivariate analysis taking into consideration of the confounding factors, the results could not be considered valid and authors should report the results again after doing the multivariate analysis.

HEMODYNAMIC EFFECTS OF TERLIPRESSIN IN PATIENTS WITH BLEEDING ESOPHAGEAL VARICES SECONDARY TO CIRRHOSIS OF LIVER

REFERENCES

1. Badruddin AH, Rasool G, Chaudhry MA. Hemodynamic effects of terlipressin in patients with bleeding esophageal varices secondary to cirrhosis of liver. J Coll Physicians Surg Pak 2006; **16**: 755-9.
2. de Franchis R. Updating consensus in portal hypertension: report of the Baveno III Consensus Workshop on definitions, methodology and therapeutic strategies in portal hypertension. J Hepatol 2000; **33**: 846-52.
3. de Franchis R. Review article: definition and diagnosis in portal hypertension--continued problems with the Baveno consensus? Aliment Pharmacol Ther 2004; **20** Suppl 3: 2-6; discussion 7.
4. de Franchis R. Evolving consensus in portal hypertension. Report of the Baveno IV consensus workshop on methodology of diagnosis and therapy in portal hypertension. J Hepatol 2005; **43**: 167-76.
5. de Franchis R, Pascal JP, Ancona E, Burroughs AK, Henderson M, Fleig W, et al. Definitions, methodology and therapeutic strategies in portal hypertension. A Consensus Development Workshop, Baveno, Lake Maggiore, Italy, April 5 and 6, 1990. J Hepatol 1992; **15**: 256-61.
6. Duvnjak M, Barsic N, Tomasic V, Jukic LV, Lerotic I, Pavic T. Adjusted blood requirement index as indicator of failure to control acute variceal bleeding. Croat Med J 2006; **47**: 398-403.

DR. BADER FAIYAZ ZUBERI,
Department of Medicine,
DOW University of Health Sciences,
Karachi. E-mail: bader@zuberi.com.pk

Author's reply

Dear Sir

In reply to the letter regarding "Hemodynamic effects of terlipressin in Patients with BOV secondary to cirrhosis of the liver, I would like to state the following:

1. As rightly pointed out the ideal treatment of BOV is early endoscopic banding or sclerotherapy, however, ideal conditions do not always exist, although our hospital is working towards that goal.
2. As far as the confounding factors of transfusion of FFPs, platelet concentrates, colloids and crystalloid solutions, blood and plasma expanders interplaying with hemodynamic effects attributed to terlipressin I refer to the article ARBI As Indicator Of Failure To Control Acute Variceal Bleeding by Duvnjak M, et al. in which the transfusions "are not reliable indicators of treatment failure…and ABRI as an independent predictor of failure to control acute variceal bleeding" and the authors further suggest "a multicentre prospective study with a larger number of patients was needed for further validation of ABRI as an independent indicator of treatment failure to

control acute variceal bleeding".

3. Finally as concluded by de Franchis R, the Baveno consensus definitions are the result of 'a consensus of experts' and not of formal 'consensus conferences'. They are useful but do not necessarily fit into our peculiar circumstances. We must endeavour to evolve our own methodology and treatment protocols.

I hope this letter will at least answer some of the points raised by the learned questioner.

DR. ALY HAIDER BADRUDDIN
Department of Medical ICU,
Jinnah Postgraduate Medical Centre, Karachi