

PSG NEWS



BULLETIN OF THE PAKISTAN SOCIETY OF GASTROENTEROLOGY AND G.I. ENDOSCOPY

MESSAGE FROM THE PRESIDENT PSG

Dear Colleagues

After a successful annual Congress I am pleased to inform you that post congress affairs were also settled amicably. The annual congress was a joint congress with Pakistan Society of Hepatology (PSH), hence an extra amount of time and effort was involved in the post Congress affairs. A committee was found under the Chairmanship of host Prof Sherbat Khan, and included Prof Bader Zuberi (GS, PSG/PSH), Col Farrukh, and the three PSG, VP's Prof Rauf, Dr. Biland and Dr. Shamil. PSH team was headed by Prof Altaf Alam and included Prof Muazum and Dr Javed Farooqi. As per formula agreed before the commencement of Congress, all expenses were divided on 60/40 basis and whatever was due to both societies was paid into their respective accounts after deduction of expenses. PSG central office was given its due share of 25% by Dr Sherbat. Prof Husnain I supervised the whole process and at the end were pleased with this pleasant exercise, since it turned out to be a financial success also.

On academic front I am pleased to report that for first time in History of PSG I was able to secure a fully paid four months Advance Endoscopy Training Fellowship, from Japan society of Gastroenterology for Dr Kamran Hassan Senior registrar ,who has already proceeded to Japan to start his training.

I have also been successful in getting a six month training slot from APAGE in China for endoscopy training and Dr Hashmat (SR) is going to proceed in January 2015 to start his training.

I urge all young gradates and trainees to apply for Fellowships and training slots through your respective VP's whenever these slot appear. We

always send the emails to all VP's and members are encouraged to apply. I am sorry to say that the response is usually not very encouraging and we end up losing these opportunities.

On research front, three of my trainees submitted abstracts to Japan Society of Gastroenterology meeting (JDDW) in October and have won travelling grants of 1500 dollars each with accommodation and registration paid for the JSG . We from PSG are not submitting enough Abstracts to International meeting and missing the opportunity to have our research heard at an international level.

On Clinical front I am pleased to note that Dr Saad Niaz in collaboration with PSG Sindh Chapter conducted a International hands on Colonoscopy Workshop with foreign faculty as co- directors. This course has become a highlight of the year in clinical activity calendar since it is at par with any International course. Trainees are requested to apply for placement at this course through their supervisors.

I congratulated Prof Mohammed Umar, one of our Ex- President, personally and on behalf of all members for being awarded Sitra-i- Intiaz this year.

In the end I pray that the current uncertainty and upheaval in country settles and Pakistan prospers.

I pray to almighty to keep us all safe.

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PAKISTAN SOCIETY OF GASTROENTEROLOGY WEEK
(SEPTEMBER 2014)

Intra-Gastric Balloon for Weight Loss

A report on Preliminary data Analysis of Efficacy & Tolerability

An ongoing study

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A cross sectional study was planned to assess the efficacy and tolerability of intragastric Balloon Placement in association with restricted diet which is being used for the short-term treatment of morbid obesity, at Department of Medicine Ghurki Trust Teaching Hospital, Surgimed Hospital, Lahore General Hospital Between June 2013 and June 2014.

Intragastric balloons were placed in 30 patients with obesity. The inclusion criteria were obesity (BMI > 35 kg/m²), the presence of obesity-related problems, and failure with conventional treatments for at least 6 months. Intravenous antiemetic, Protein Pump Inhibitor (PPI) and spasmolytic drugs were given to control post-insertion nausea for 24 hours, and oral medication were administered later on. A standard 1200 Kcal diet was prescribed after dietitian's consultation. Balloon was kept for six months and then removed endoscopically. Any morbidity, complications, BMI and weight loss were evaluated. Data were expressed as mean \pm SD. Statistical analysis was performed by means of Student's t-test, and Shapiro Wilk's test; P < 0.05 was considered significant.

Thirty patients (16 M, 14 F) with mean age of 33 \pm 8 years were included. 28 patients were eligible for review after 6 months; Mean weight loss was 21.2 \pm 9.05 (3-56 kg). Mean initial weight was 125.8 \pm 37.5 (102 to 236 Kg) and it dropped to 104 \pm 25.9 (82 to 180Kg) (p<0.05) six months later. Mean pre-procedure BMI was 43.6 \pm 3.6 (37.6 to 50 kg/m²) while 6 months later it dropped to 37.7 \pm 4.2 (p<0.05). 100% of the patients complained of severe nausea, vomiting, epigastric discomfort and retrosternal burning, resulting in early removal of the balloon at day 7 in two patients. In 82% patients, esophagitis (grade III to IV) and diffuse gastric erosions were present at the time of withdrawal of balloon. Thus it was concluded that Intragastric balloons may be helpful in combating the obesity

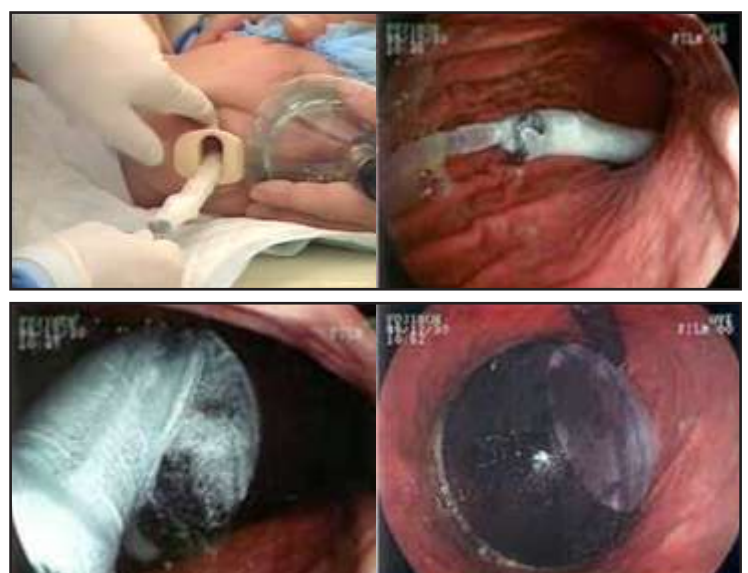


epidemic and its associated health implications by achieving weight loss in patients but more data regarding the mode of action of intragastric balloons, the identification of suitable patients for this procedure and management of adverse effects will be needed before its recommendation in usual weight loss programme and obesity management guidelines. Although efficient, but high incidence of adverse-effects make IG balloon a poorly acceptable choice.

- a) Intragastric Balloon
- b) IG balloon in stomach

For purpose of clarification the above figures a) and b) were taken from the following site:

http://www.nqobesitysurgery.com.au/obesity_surgery/intragastric_balloon.php



- i) Introduction of balloon
- ii) Balloon Inside the stomach
- iii) Inflation with saline
- iv) Fully inflated balloon in fundus of stomach

Case Report

Amebic liver Abscess in a Two year old Boy Presenting with Abdominal Pain and Fever

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Amebic Liver Abscess is a common manifestation of infection with *Entamoeba histolytica* extra intestinally. The infection is endemic in Pakistan. The infection is common in various areas of Pakistan and can have a high morbidity when amoebic liver abscess ruptures¹.

In the United States the incidence of liver abscess secondary to *Entamoeba histolytica* is approximately 3-5%. Incidence is higher in specific groups, including residents of group homes, male homosexuals and immigrants from endemic areas. Mostly affected are the Hispanic males in the Southwestern areas of the USA. The annual incidence in the USA is 1.38 per million population with a 2.4% average annual decline during this study².

The causative agent; *Entamoeba histolytica* a protozoa ascends through the portal venous system to form a space occupying lesion in the liver. Hepatic disease occurs when the trophozoites reach the liver via the portal vein and are able to penetrate the hepatic parenchyma, where through elaboration of the proteolytic enzymes abscess formation occurs. Spread to other organs may occur such as the brain, lung, heart and spleen. Local spread of amoebic organisms may result in cutaneous ulcerations, especially in the perianal region in children. Hepatic abscess formation is estimated to occur in 1-7 % of the paediatric patients with invasive amoebiasis³. Early diagnosis and accurate treatment has shown improved morbidity and mortality⁴.

Amebic liver abscess is fairly uncommon in the neonatal population. According to a study, three (3.6%), out of the eighty who presented to the hospital with Amebic liver abscess, were neonates (<28 days of age)⁵.

We report the case of Amebic liver abscess in a 2 year old boy who was receiving multiple antibiotics and with no response. The child was referred to our hospital

and was managed after appropriate investigations including radiological evaluation in our unit, without aspiration of the abscess and responded with amebicidal therapy.

CASE REPORT

A 2 year old boy, Umer Haq, presented to the emergency with the complaint of fever on and off for the last one month, abdominal discomfort and pain since the last one week. According to the parents, the child was not eating well and had lost weight in the last one month. There was a history of diarrhea episode about one month ago. Mother said that the child had dysentery for which the child had been given medications by a local general practitioner in the past.

Height and weight of the child were on the 10 centile (CDC, centre of disease control charts). On general examination the child had a toxic look, was pale and lethargic. There was pain and tenderness in the right hypochondrium.

Complete blood count reports showed leukocytosis ($18 \times 10^9/L$. Normal values $4.00 - 11.00 \times 10^9/L$). Haemoglobin levels were low (8.5g/dl Normal values: 11.5 - 13.5 g/dl). Serum Alkaline Phosphatase levels were raised. Serum ALT and AST were also on the higher side but Serum Albumin was decreased. Total Bilirubin was within the normal range (0.8 mg/dL). Bacterial culture showed no growth. Examination of stools for trophozoites or cysts was negative. Haemagglutination Assay was negative for *Echinococcus granulosus* (3.46 IU/dL) and Indirect Haemagglutination test (IHA) for *Entamoeba histolytica* was positive which suggested the diagnosis to be Amebic Hepatic Abscess.

For further evaluation radiology workup was done. The Ultrasonography (done on 12-02-2014) pointed towards the diagnosis of liver abscess. Size of the abscess was 3.81 X 3.048 cms (Fig 1).

On the basis of the clinical examination and the diagnostic test results, the patient was then prescribed and administered Metronidazole 50 mg/kg/day in

divides doses for 10 days. Surgical drainage was not required due to the size and good response with the amebicidal drug.

Ultrasound was repeated on 17-02-2014 which showed that the size of the abscess had reduced in size from 3.81 X 3.048 cms to 1.5 X 1.2 (Fig. 2) followed by 1.05 X 0.81 cms on 13-03-2014 (Fig.3), this was on follow up at the outpatient department and after

discharge of the patient which shows that some cases of Amebic Liver Abscesses respond better to drug therapy without aspiration.

On Follow up, as shown in Fig. 3, at the outpatient department early this year, the child was clinically better and on a regular diet recommended for his age, had gained weight and was more active and playful.

Fig 1, 2 and 3: Show amoebic liver abscess in a 2 year old male child. Following treatment the size of the abscess decreased from 3.81 X 3.048 cms to 1.5 X 1.2 cms followed by 1.05 X 0.81 cms.





DISCUSSION

Amebic Liver Abscess presents with tenderness in the right hypochondrium with generalized abdominal discomfort, nausea, anorexia. There might be a history of chronic fever as well. Complete blood count points towards leukocytosis and imaging scans would show abscess formation in the liver. The key diagnosis is the Indirect Hemagglutination Assay for *Entamoeba histolytica* which helps the physician reach a complete diagnosis and ultrasonography.

It has been suggested that if abscess is larger than 10cms in size, in the left lobe, multiple or in close contact with the diaphragm should be aspirated⁶. In this child it was less than 5 cms and anatomically not close to the diaphragm, also there were no multiple abscesses present. Hence the child was given medical therapy alone and no surgical intervention was done.

Studies suggest that cases of Amebic Liver Abscess have settled better with drug therapy alone as compared to Pyogenic Liver Abscess (about 5 cases out of 11)⁷ Considering the generally small size of the abscess in pediatric population, it is almost always a better option to keep the patient on drug therapy alone (preferably Metronidazole MTZ). The Dose of MTZ suggested in

pediatric patients varies from 35 to 50 mg/kg/24hours⁸. This treatment can also be followed by a luminal amebicide such as iodoquinol or paromomycin.

CONCLUSION

Efficient and early diagnosis followed by careful study of the abscess and solely drug administration can result in better resolution of the symptoms and the disease compared with the need for surgical intervention in pediatric population presenting with Amebic Liver Abscess.

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Literature Review

Supplement article published: An Epidemiologic Update on Hepatitis C Infection in Persons Living With or at Risk of HIV Infection • JID 2013:207 (Suppl 1) •
(Summarised from the above, article,
with comments about our local situation in the last paragraph)

This article mentions that HIV-1 and HCV coinfection are fairly common in the United States due to shared route of infections. The co-infection results in accelerated liver disease with increasing morbidity and mortality especially in the young adult population. The increasing frequency of HCV infection occurring in the young injection drug user and men who have sex with men is a serious concern. The co-infection results in worsening of the liver disease. The burden of the liver disease is addressed by giving expensive anti viral therapy or by access to liver transplantation. Both these are costly interventions. Therefore, the most effective measure against HCV would be the vaccine, however, since to date this vaccine has not been developed, therefore the only method of decreasing this morbidity and mortality secondary to co-infection would be early detection of HCV and public health strategy to combat HCV.

The infection with HCV whether acute or chronic is generally without any significant symptoms, therefore the burden of infection among the adolescents and

young adults may be higher due to undiagnosed infections. This article reports that the majority of cases in which risk behaviour has been documented have taken heroin in the past or are taking it currently.

The risk of HCV infection from an infected mother to her baby is low. However, the burden of HCV infection in females of child bearing age may result in greater opportunities for the transmission by virtue of the large population of infected mothers. If a parallel increase of HIV infection is seen in this population, risk of HCV transmission to the baby would be augmented due to the impact HIV can have on the perinatal HCV transmission.

Comments on local situation- Pakistan

The HIV prevalence is more than 5% among injecting drug users (IDUs) in at least eight major cities of Pakistan. HCV infection is a problem in Pakistan. Numerous articles are available which document the

modes of transmission of HCV. Data regarding the frequency is also available in both the paediatric and adult population. However, data regarding co-infection of HCV and HIV infection is scarce. Perinatal transmission of HCV has been documented and local published data is available.

However, there are no countrywide definitive guidelines suggesting preventive measures of these infections or any standard protocol being followed at a private and government level both.

On a daily basis we see drug addicts on the road side openly using injectables of an extremely unhygienic nature. The living condition of these individuals is deplorable. There has been no definitive action taken for these poor people who need therapy both of rehabilitation and medical therapy. How many of these individuals are infected with HCV or HIV or both and how many partners are they infecting on a daily basis? No-one knows and there is no definitive data. If they ever go to a doctor for some vague complaint the patient is probably not screened for these infections? Hence, perhaps Pakistan is sitting under a ticking AIDS bomb which can explode at any time. Someone needs to develop these guidelines/strategies to prevent

and curtail the spread these infections.

Also, even though some centres are routinely screening pregnant women for HCV and HBV but there are no recommendations or guidelines in this country to suggest that screening of every pregnant mother for HCV should be done. Even if the perinatal transmission of HCV is low, screening of potential mothers to be, would be more cost effective rather than treating the babies of infected mothers.

Hence prevention of HCV infection and HCV among HIV infected is crucial. Checking for HCV antibodies and work-up of liver function tests in HIV – positive would be more cost effective approach.

Therefore increased surveillance, funding and support at a government level with guidelines for prevention and screening of these infections by a reputable team of specialists and co-ordination between public and health care providers may reduce the morbidity and mortality related to HCV and HIV co-infection.

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RECENT UPDATE

Drug Induced Liver Injury- Chalasani NP, Hayashi PH, Bonkovsky HL, et al; Practice Parameters Committee of the American College of Gastroenterology. ACG clinical guideline: the diagnosis and management of idiosyncratic drug-induced liver injury. *Am J Gastroenterol.* 2014;109:950-966.

Idiosyncratic drug induced liver injury (DILI) is a rare adverse drug reaction and it can lead to jaundice, liver failure, or even death. Antimicrobials and herbal and dietary supplements are among the most common therapeutic classes to cause DILI in the Western world. DILI is a diagnosis of exclusion and thus careful history taking and thorough work-up for competing etiologies are essential for its timely diagnosis. In this ACG Clinical Guideline, the authors present an evidence-based approach to diagnosis and management of DILI with special emphasis on DILI due to herbal and dietary supplements and DILI occurring in individuals with underlying liver disease.

Take away points

1. DILI process of exclusion of other causes of liver disease
2. Thorough history and physical examination that identify causative medications.
3. The ACG guidelines -- algorithm defined by

identification of suspected DILI as hepatocellular, cholestatic, or mixed hepatocellular/cholestatic liver injury, with a differential diagnosis and clinical judgment that establish the final diagnosis.

4. Individuals with suspected hepatocellular or mixed hepatocellular/cholestatic liver injury should be evaluated for acute viral hepatitis caused by HBV and other nonhepatotropic viruses (cytomegalovirus, Epstein-Barr virus, herpes simplex), and for autoimmune hepatitis and other forms of acute liver injury, such as Budd-Chiari syndrome and Wilson disease.

5. Wilson disease typically presents as acute liver injury before the age of 25 years, although it can present later in life.

6. Routine testing for HEV in patients with suspected DILI is not currently recommended.

7. Patients with cholestatic liver injury should be evaluated with ultrasonography to exclude primary biliary, and with cholangiography as needed for suspected stones, strictures, or tumors.

8. Consideration of liver biopsy for patients with possible autoimmune hepatitis or when abnormal liver tests fail to resolve promptly.

9. Patients with suspected DILI should stop taking offending medications.

10. Re-exposure to a drug suspected of causing DILI is discouraged.

EDITORS NOTE

السلام عليكم ورحمة الله وبركاته

Hope all of you are in the best of health. Last 3 months have been very slow, with hardly any activities on the PSG front (or not forwarded to us). However, in this month we have the APASL STC Pakistan 2014 on Hepatitis C Virus Care & Cure. October 17 to 19, 2014 at DHA Golf club, Karachi. Hopefully you will get this newsletter before the start of the conference.

My suggestion to all especially the postgraduates is to attend this dynamic meeting to keep abreast with the latest information and core knowledge from well renowned speakers from within the country and abroad. The conference also includes a postgraduate course, scientific symposia, debates, free papers, poster session and social programs. Further information can be obtained from www.apaslstcpakistan2014.com. The postgraduate course is being held in AKUH.

Prof. Badar Fayaz Zuberi has made an effort to revise the PSG site: www.psg.org.pk. We thank him for his hard work in this endeavour. Together as a team we have a better chance to progress and accomplish greater results in the field of Gastroenterology both locally and abroad.

As usual I would request you to submit case report, news of interest to the PSG newsletter, well in advance. Next issue Inshallah is in January 2015 for publication.

Regards

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Publication Secretary, PSG