HERNIA REPAIR WITH LOCAL ANAESTHESIA IS A COST-EFFECTIVE TECHNIQUE

Dear Sir,

Groin hernia is a common problem around the world. The incidence is 15/1000 and total number of herniorrhaphies performed per year is about 700,000. It is a huge socioeconomic burden. General anaesthesia (GA) for hernia repair costs 4% more than the same operation under local anaesthesia (LA).

The services may be made more cost-effective by increasing day care surgery and reducing expenses incurred by family during transportation and customs of visiting an ailing relative. With modern tension-free repair methods, there is no need to limit activity following surgery and minimum hospital stay decreases psychological effect on patients and their relatives (family). Procedure under LA also reduces cost and economic burden by avoiding unnecessary investigations as required before GA. Other benefits include early recovery and return to work, less health care spending in terms of equipment and human resources and above all, best use of our Taluka and District hospitals.

It is possible to repair not only all inguinal hernia, primary or recurrent, safely by using local anaesthesia but other hernias (incisional and paraumbilical) can also be repaired by using the same technique. A total number of 500 patients were operated, using local anaesthesia (lignocaine with or without adrenalin depending on comorbid) during the years 1993 to 2005. The study included all those patients presented with inguinal hernia whether direct or indirect, unilateral or bilateral, with or without comorbid (COPD, heart diseases ASA-IV), age not less than 20 years.

Out of a total 500 patients, 166 had mesh repair while rest of the cases were done with fascial repair. The mean age of patients was 50 years. Complications rate with regard to infection, scrotal oedema and haematoma were 0-04% respectively. All were managed conservatively. Recurrence occurred in 0.8% cases (n-4).

Several studies have found that with proper “preparation and case selection, more than 90% of inguinal hernia can be repaired under local anaesthesia. Using mesh does not increase the risk of infection and if infected, mesh doesn’t need removal. Based on more than 150 articles in surgical literature, the recurrence rate is consistently less than 1%, ranging between 0 - 0.7%.

The most significant complication after mesh repair were testicular atrophy and chronic neuralgia with a reported rate of less than 01 %.

Ecchymosis occurred secondary to reactionary haemorrhage because of cessation of reflex vasospasm initiated by the L.A with adrenalin but it settled itself and need no special treatment.

The advantage of local anesthesia includes the very short recovery time and ability to test repair intraoperatively by a valsava maneuver or cough. L.A has fewer adverse effects on respiratory functions than G.A and majority of patients with systemic diseases can be operated safely with L.A. Local anesthesia is not only cost-effective compared to G.A and spinal but early recovery and return to work are another beneficial factors. Current recommendations for time off work need to be considered. The cost of groin hernia repair can be reduced by increasing day care surgery. All surgeons in resource poor countries should be encouraged to use local anaesthesia more frequently for elective inguinal hernia repair and the technique should be taught in teaching institutions.

REFERENCES


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Dear Sir,

Right-sided endocarditis usually involves the tricuspid valve and occurs predominantly in intravenous drug users.

TRICUSPID VALVE ENDOCARDITIS WITH THROMBOTIC THROMBOCYTOPENIC PURPURA - AN ATYPICAL PRESENTATION

although, occasionally, it is acquired nosocomially from the contaminated intravascular devices.

A 36-year-old man with a history of intravenous drug abuse for 14 years was referred to the cardiothoracic surgery service. He was investigated for a one and-a-half month history of generalized lethargy, diarrhea, cough and fever. His past medical and surgical history was unremarkable. His general practitioner had treated him with erythromycin, with little effect.
on his symptoms. On physical examination, he had a body temperature of 39.5°C and maculopapular rashes all over the body. The heart rate was 120 beats per minute with a blood pressure of 100/60 mmHg. His jugular venous pressure was raised at 4 cm above the clavicle with a prominent V wave. On auscultation, the patient had a pan-systolic murmur at the left sternal edge which was accentuated on inspiration, and coarse crepitations at the base of the right lung. Abdominal examination revealed splenomegaly. His lab investigations showed a hemoglobin concentration of 7 g/dl, a platelet count of only 24,000/mm³ and a white blood cell count of 18400/mm³. He was also found to be Hepatitis B and Hepatitis C positive. A transthoracic echocardiogram showed a thickened tricuspid valve with a large mobile vegetation, greater than 4 cm in size, on it, restricting the valve mobility (Figure 1). This was also confirmed by a transesophageal echocardiogram. The blood cultures were found to be positive for *Staphylococcus aureus* for which he was administered intravenous cloxacillin and ciprofloxacin. In spite of 48 hours of I.V. antibiotics, the patient continued to remain septic and his condition deteriorated further. At this point, he was taken to the operating room and his open-heart surgery was performed.

His right atrium was opened and all three leaflets of the tricuspid valve were found to be totally destroyed with disruption of the chordae, and covered with large vegetations. The entire valve, as well as the vegetations, was removed and the patient was successfully weaned off cardiopulmonary bypass. The tricuspid valve was not replaced with prosthesis. Histopathological examination of the tricuspid valve along with the vegetations showed extensive infiltration with *Staphylococcus aureus*. The patient’s fever resolved and he made an uneventful recovery. He was discharged home on 6 weeks of I.V. cloxacillin. Follow-up echocardiography showed good heart function.

Surgical options for patients with tricuspid endocarditis vary from complete excision of the valve to tricuspid valve replacement with a prosthesis. Right sided endocarditis usually presents with respiratory symptoms and signs and rashes. The patient has been usually thought to have pneumonia. Despite advances in the diagnosis and antimicrobial treatment of infective endocarditis, brought about mainly the use of transesophageal echocardiography and the availability of new powerful chemotherapeutic agents, eradication of the septic focus and abolition of the accompanying systemic manifestations frequently require surgical intervention. The successful treatment of tricuspid endocarditis should include the excision of all infected tissue and restoration of valvular competence. Arbulu and associates proposed tricuspid valve excision without replacement. Such a procedure allows complete removal of infected tissues; moreover, the absence of a tricuspid valve can be well tolerated by patients with normal pulmonary artery pressure.

The procedure is indicated especially in patients addicted to I.V. drugs, in which complete absence of a tricuspid valve can avoid recurrence of infection. However, about 25% of patients cannot tolerate tricuspid regurgitation and require a second operation for tricuspid valve replacement. Tricuspid repair in patients with infective endocarditis, is reported with high rates of surgical cure, good hemodynamic results and good long-term survival. It is concluded that surgical management of endocarditis is a technically challenging but rewarding procedure that should be offered to appropriate patients.

**REFERENCES**


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Dear Sir

Yersiniaiae belong to family enterobacteriaceae. The genus has eleven species and among them, *Yersinia pestis* is known to cause cutaneous infection. Others, including *Yersinia pseudotuberculosis* and *Yersinia enterocolitica* are enteric pathogens and transmitted by oro faecal route. However, there are reports of cutaneous involvement in *Y. pseudotuberculosis*. Clinical manifestations are more numerous with *Yersinia*...
CUTANEOUS INFECTION WITH YERSINIA PSEUDOTUBERCULOSIS PRESENTING WITH SPOROTRICHOID SPREAD

pseudotuberculosis than with Yersinia enterocolitica. These may include enteritis, mesenteric adenitis, pseudoappendicular syndrome. Erythema nodosum along with arthritis may be an associated feature. Of late, septicemic forms have been reported more frequently. A 65-year-old male presented with 5 months history of multiple noduloulcerative lesions over his left hand and forearm. A farmer by profession, the patient developed a couple of mildly tender papulonodular lesions over the dorsum of his left hand. These gradually increased in size and became necrotic and later ulcerated. Meanwhile, he developed similar noduloulcerative lesions proximally over his left forearm. There was scanty purulent discharge from the lesions. It was associated with low intermittent fever. There was no history of any trauma, nor was there any urinary or bowel complaints and no other family members were affected. There was no history of diabetes or hypertension. He had been unsuccessfully treated with various drugs, particularly by “Hakims,” “Homeopath” and quakes in the village. On examination, he was a healthy looking individual having multiple noduloulcerative lesions arranged in a linear fashion over the dorsum of his left hand, left wrist, and forearm (Figure 1). All the lesions were erythematous and mildly tender except two, over forearm. They were ulcerated with purulent necrotic slough in the center. Axillary lymph nodes were not palpable. Examination of chest and abdomen did not reveal any abnormality. His blood counts, routine urine examination and liver function tests were within normal range and Mantoux test was negative. X-rays of chest did not reveal any abnormality. Histopathological examination of the local lesion revealed necrotic epidermis with focal infiltrates of acute inflammatory cells in the deep dermis; no fungal colony, granuloma or LD bodies were detected. AFB stains were negative. X-rays of chest did not reveal any abnormality. Serology, if available in this particular case, would have helped if the organism were not isolated. Added to it, the quick, effective and lasting response to the otherwise common antibiotic in comparison to several weeks to months required with same drugs for other rare infections like non-tuberculous mycobacterial infections supports our suggestion. Yersinia pseudotuberculosis may cause primary cutaneous infection and appropriate antibiotics can completely remove the organisms, keeping in view the susceptibility pattern. Moreover, it may be added to the list of organisms spreading along the lymphatics. However, search for an underlying immunodeficiency and presence of a non-tuberculous mycobacterial or a rare fungal infection should be made for final disposal of such cases.

REFERENCES
Dear Sir,

Gallstone ileus is a rare disease and accounts for about 1-3% of mechanical ileus of the small bowel, but for 25% of all small bowel obstruction in patients older than 65 years. Pre-operative diagnosis of the gallstone ileus is difficult and controversy exists in the management.

A 48 years old, diabetic lady presented to our emergency department with features of intestinal obstruction. Five days prior to admission, she developed generalized abdominal pain with repeated vomiting. Two days before, she developed anuria and absolute constipation. She had past history of pain right hypochondrium and jaundice two months before. On presentation, she was vitally stable and her abdomen was distended, soft with generalized tenderness but no guarding. Investigations revealed leukocytosis, marginally raised bilirubin (1.20 mg/dl), blood glucose level of 547 mg/dl, serum urea of level 245 mg/dl, serum creatinine level of 6 mg/dl, serum potassium level of 5.5 mg/dl, serum ALP 491 units/dl. Plain X-ray abdomen showed dilated small intestinal loops and pneumobilia. CT scan abdomen (Figure 1) revealed gallstones, pneumobilia, biloenteric fistula and gallstone ileus. Provisional diagnosis was small intestinal obstruction secondary to gallstone ileus. After resuscitation, exploratory laparotomy was done. Peroperative findings were collapsed caecum and terminal ileum. Jejunum was distended with two large stones inside the lumen. Gallbladder was oedematous, thick walled with one large stone inside the gallbladder. Longitudinal enterotomy was done at the antimesenteric border proximal to the stone. Decompression of the intestinal contents and milking of the stone was done. Stones were removed through the enterotomy. Enterotomy was closed in two layers. Cholecystectomy was done at fundus of gallbladder with removal of gallstone. Postoperatively, patient improved uneventfully and was discharged on 6th postoperative day with advice for interval cholecystectomy and excision of fistula after 3 months.

It was intraluminal intestinal obstruction caused by large gallstone which entered the intestinal tract subsequent to the establishment of a biloenteric fistula. Common fistula sites include the duodenum, stomach, colon and jejunum. Once in gastrointestinal tract, stones may pass out spontaneously or become impacted, causing mechanical obstruction. Common sites for obstruction are terminal ileum (70%), duodenum (Bouveret's syndrome), ileocecal valve, jejenum and colon. Pre-operative diagnosis of the gallstone ileus is difficult and controversy exist over the definite surgery (one-stage versus two-stage procedure). Helical CT improves the diagnosis. A two-stage procedure consists of correction of obstruction at first instance and fistula to be dealt with later, while one-stage procedure describes enterolithotomy, cholecystectomy and closure of the fistula, all to be done at the same time. One-stage procedure decreases the mortality by 30% and decreases the complications like cholangitis, cholecystitis and recurrent ileus but bears the risk of enteric or biliary leakage after fistula closure. Few centers used laparoscopy for diagnosis as well as treatment as laparoscopically-assisted enterolithotomy.

In the elderly and frail patient with ileal obstruction, removal of impacted calculus through a small enterotomy should be done at first instance. Choleduodenal fistula can be dealt with at a subsequent operation. One-stage enterolithotomy with cholecystectomy and closure of the duodenal fistula is useful in young and fit patients who can tolerate the long surgery. In case of colonic obstruction and cholecystocolic fistula, the stone should be removed through a small opening in colon and exteriorization of the colonic fistula as a proximal diverting colostomy should be done.

REFERENCES

Dear Sir,

Acute postinfectious glomerulonephritis is a common occurrence in children in Indian subcontinent.¹ It is commonly caused secondary to an infection with Streptococcus pharyngitis or pyodermas.² It is also uncommonly seen with Salmonella infections.³,⁴ We present a unique case of acute glomerulonephritis secondary to a mixed infection with Streptococcus and Salmonella typhi. To the best of our knowledge, this is the first report of mixed infection causing glomerulo-nephritis in a child.

A 7-year-old girl presented in the outpatient department with generalized anasarca, decreased urine output, high grade fever, headache and fatigueability since 3 days. There was history of loose stools and vomiting one week prior to symptoms and history of rhinorrhea and sore throat about 2 weeks back. There was no history of breathlessness, yellowish discoloration or similar episodes in the past. Family history was insignificant. There was history of taking anti-tubercular drugs for biopsy-proven tubercular lymphadenopathy 3 years back. Physical examination revealed an appropriately grown toxic looking, febrile child (weight 18.5 kgs, Ht 116 cms) with generalized anasarca, mild pallor, distended abdomen, ascites, splenomegaly and decreased air entry on the right side. There was no icterus, murmurs heard or signs of congestive heart failure. Blood pressure was raised 126/74 mmHg. Investigations revealed Hb 10.5 g%, TLC 6800/cumm, DLC P64L32, CRP positive (1.2 mg/dl), serum albumin 2.9 g/dl, serum cholesterol 190 mg/dl, urinalysis showing 10-20 RBC's/hpf, 8-10 WBC's/hpf, one plus albumin, occasional granular casts, serum urea 21 mg/dl, creatinine 0.8 mg/dl, serum electrolytes 134/4.1 mmol/l, C3 levels 43 mg/dl (77-195 mg/dl), ASO titers 1600 Todd units, Anti-DNase B 1200 units, serum Widal positive (Both O and H titres for S. typhi 1:160). Urine, blood and throat swab culture were sterile. Chest X-ray revealed a small right pleural effusion. Ultrasound showed mildly enlarged kidneys with maintained cortico-medullary differentiation and ascites.

The girl was managed conservatively with intravenous ceftriaxone, enalapril and salt restricted diet. Her edema resolved within 3 days and urine output improved (urinalysis at this stage showed 2-3 RBC's/hpf). Her general condition improved and she became afebrile. She was discharged after 5 days and, at one month follow-up, she was doing well with normal blood pressure and urine output.

Long-term outcome of children with post-streptococcal glomerulonephritis is good. It has been highlighted that complications of enteric fever have a sex predilection with females more prone to have nephritis.⁵ Our child had evidence of mixed infection with Streptococcus and Salmonella. Although ASO titres were non-specific for streptococcal infections, raised anti-DNase B levels further provided evidence of this infection in our child. Toxic appearance of child with raised widal titres and satisfactory response to intravenous antibiotic supported Salmonella infection. Even though it would have been ideal to do a renal biopsy (consent could not be obtained), possibility of coexistence of double glomerulopathy was highly unlikely as complement levels were low making IgA nephropathy unlikely and absence of extra-renal findings ruled out Alport's disease.⁶

Mixed infections with streptococcal and enteric infections may be a much more common cause of glomerulonephritis in children in tropical countries than reported in the literature.

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