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ANAESTHETIC MANAGEMENT OF HENOCH SCHOLEIN PURPURA IN ADULT WITH ACUTE ABDOMEN – A CASE REPORT

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ABSTRACT Henoch-Schonlein Purpura (HSP) is a small vessel vasculitis mediated by IgA-immune complex deposition. It is characterized by non-thrombocytopenic purpura, arthritis or arthralgia, abdominal pain, and nephropathy. HSP has an overall excellent prognosis in children, but very rarely reported in adult. There are hardly any evidence for the anesthetic management of adult patients with HSP. We report a sucessful management of a case of a young adult with HSP who presented with acute abdomen for laparotomy. A 25yr old male with HSP presented with acute abdomen two days after admission. Under general anaesthesia with epidural anagesia, emergency laparotomy and resection anastomosis was done. Patient was stable post op and discharged on 5th post operative day. Bowel ischaemia secondary to HSP is a very rare complication. Monitoring and frequent reassessment with early surgical intervention helps to reduce morbidity, and improves outcome. Epidural analgesia can be safely administered in a patient with HSP as it avoids the use of non steroidal anti inflammatory drugs for post operative analgesia.

KEYWORDS : henoch scholein purpura, anaesthesia, epidural, laparotomy,

INTRODUCTION

Henoch-Schonlein Purpura (HSP) is an autoimmune acute leucocytoclastic vasculitis of childhood, was first described in 1837. [1] It is a small vessel vasculitis mediated by IgA-immune complex deposition and is characterized by clinical tetrad of non-thrombocytopenic palpable purpura, abdominal pain, arthritis and renal involvement. Though it primarily affects children (over 90% of cases), the occurrence in adults has been rarely reported (3.4 to 14.3 cases per million.[2] Proposed triggers include upper respiratory tract infections, medications, vaccinations, and malignancies . The pathophysiology behind HSP is not yet completely understood. [3.] We present the management of young adult with HSP, presented with bowel infarction, who underwent resection anastomosis.

CASE

A 25yr old male admitted with complaints of purpura both legs, abdomen and upper limb with joint pain (knee and ankle) and lower limb swelling for one month. His skin biopsy showed leukocytoclastic vasculitis of small vessels. He was diagnosed as a case of HSP and started on methyl prednisolone. Patient developed acute abdominal pain on day 2 of admission with one episode of haematochezia. Examination of abdomen showed guarding and rigidity. CT showed long segment small bowel thickening, sub mucosal edema with impending gangrene. Patient was posted for emergency laparotomy. His urine routine, renal and liver function tests were normal.

Haemoglobin was 13.1mg/dl, platelet was 5,18,000, total count 15.9, bicarbonate 18.9, complement C3- 178 mg/dl, C4 58mg/d, CRP 89 and Procalcitonin 6.7.

After preop assesmenet and obtaining consent, patient was shifted to OT. After connecting ASA standard monitors, 16 G iv line was secured in non dominant hand. During preoxygenation, fentanly 100mcg and 1g paracetamol was given . General anesthesia with RSI was induced using propofol 100mg and rocuronium 50mg. Epidurally 0.1% ropivacaine with 2mcg fentanyl was started as an infusion at the rate of 7-12ml/hour after induction. Hydrocortisone 50 mg was also administered. Anaesthesia was maintaiened with isoflurane 1 MAC in 50% oxygen and 50% air. He was haemodynamically stable thoughout the procedure. Resection anastomois of distal ileum was done. After completion of procedure patient was extubated fully awake and shifted to post operative ward for monitoring. Post operatively, pain was managed with paracetamol, tramadol and epidural analgesia (continued for 48 hours). Steroids was continued as per dermatologist orders. Patient was comfortable, discharged on 5th post operative day and was on follow up with dermatologist .

DISCUSSION

Adult-onset HSP been described with only 3.4 to 14.3 cases per million reported in the adult population.[2] Henoch-Schonlein purpura is a leucocytoclastic vasculitis of small vessels, with potential for necrotizing vasculitis of the kidney and gastrointestinal tract. Polymorphonuclear leukocytes are recruited by chemotactic factors and cause inflammation and necrosis of vessel walls (focal fibrinoid necrosis) with occasional thrombosis, and with associated red blood cell extravasation, consistent with a form of leukocytoclastic vasculitis resulting in characteristic non blanching palpable purpuric rash[4]It is a disease of the skin,mucous membrane and sometimes other organs. It mostly affects children, peak incidence being between 2 and 6 years of age. It usually occurs followng exposure to drugs or as a response to infectious agents such as Mycoplasmas and Group A streptococci . Other triggering agents such as drug allergies, food reactions, exposure to cold, insect bites, may also be seen.[3] There is the deposition of immune complexes containing the antibody immunoglobulin A(IgA) and complement complexes (C3) in the arterioles, capillaries, and venules. The classic triad of symptoms includes purpuric rash occurring on the buttock area and lower extremities, arthritis involving knees, ankles, elbows and a colicky abdominal pain. It usually resolves within several weeks and can be managed symptomatically.[5] According to diagnostic criteria of the European League against Rheumatism and Paediatric Rheumatology European Society, palpable purpura plus one feature among the following suggests the diagnosis of HSP- 1. Diffuse abdominal pain 2. Arthritis or arthralgia . 3. IgA deposition in any biopsy 4. Renal involvement (haematuria/proteinuria)[5] IgA deposition may be found in the skin, and serum titers may also be elevated. Treatment is corticosteroids as it is beneficial for arthritis, gastrointestinal symptoms and has a protective effect against nephritis. [6] Plasmapheresis may be used in case of progressive renal failure. Immunosuppressant like cyclophosphomide are also used but there is no consensus regarding the exact treatment.[2,7] In up to 33% of the patient's gastrointestinal (GI) symptoms may also occur. Abdominal pain due to vasculitis of the gut may lead to intestinal mucosal swelling, edema and subserosal, and submucosal hemorrhage, leading to serious GI tract complications including intussusception, bleeding, gastric ulcer, intestinal perforation, and necrosis leading to laparotomy.[8]

Plan of anesthesia can be decided upon the patient's clinical condition. There is no consensus about the best anesthetic technique. If standard coagulation tests including platelet count are normal, then regional anesthesia is not contraindicated. [9] The administration of anesthetic agents or other medications dependent on renal elimination must be avoided. Intravenous fluids should be admintered judiciously. Perioperative steroid cover should be considered for patients on steroids Attention should be paid to decrease the risk of tissue compression over pressure points such as that associated with positioning. Post operatively patient should be monitored closely in high dependency unit. Proteinuria and hematuria indicate possible renal involvemen which if progresses to renal insufficiency has a poor long-term outcome. Post operative pain management should be carefully chosen by avoiding drugs like NSAID which are likely to affect kidneys. Epidural analgesia is a better choice considering the magnitude of pain and availabilty of drugs.

Data Availability

Data used to support the findings of this study are available from both the corresponding authors upon request to protect patient privacy Conflicts of interest

Authors declare that there are no conflicts of Interest regarding the

publication of this paper.

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