



RETROSPECTIVE STUDY ON PATIENTS WITH PERIANAL ABSCESS UNDERGOING SURGERY AT JSS HOSPITAL IN A 2 YEAR PERIOD

General Surgery

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ABSTRACT

Perianal abscess is a common surgical emergency in India, representing a spectrum of clinical infectious conditions across age groups and gender. It is associated with significant morbidity and prolonged postoperative recovery period.^{[1][2][3]} Etiology is multifactorial, and several organisms have been isolated from cultures, the most common being Gram negative organisms. With misuse of antibiotics, several microorganisms have now become resistant to what were earlier the gold standard and first line of treatment.^{[4][5]} A retrospective study on 100 patients with perianal abscess who underwent surgery in the form of Incision and Drainage at JSS Hospital, Mysuru was done. Patients were studied for clinical and microbiological data, viz. Age, gender, presenting complaints, culture and sensitivity reports, organism isolated, resistance etc. Results showed a significant number of patients with perianal abscess had underlying comorbidities such as Type II Diabetes Mellitus and Hypertension. Majority of the organisms isolated were Gram negative bacilli, with significant levels of resistance to cephalosporins. However, no significant difference in resistance levels were seen in patients with and those without comorbidities. Perianal abscess is an infectious pathology of the perianal region, causing significant morbidity. The most common organisms isolated are gram negative bacilli, with significant levels of resistance to lower generation of antibiotics. Empirically starting higher generation antibiotics, while at the same time judicious use of antibiotics in patients who present early, may help in enhanced recovery postoperatively, and may help to reduce levels of resistance in the future.

KEYWORDS

AIMS & OBJECTIVES:

To determine clinical and microbiological data of patients with perianal abscess undergoing surgery, to determine most commonly isolated organisms and levels of antibiotic resistance.

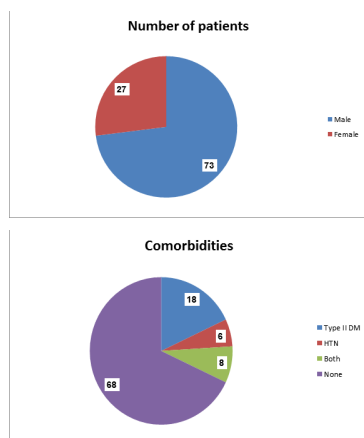
METHOD:

100 patients with perianal abscess undergoing surgery at JSS Hospital, Mysuru, from January 2018 onwards, were randomly selected. Clinical and microbiological data viz., Age, gender, comorbidities, culture report, antibiotic resistance etc., were collected and analysed.

- (a) Inclusion criteria: all patients with perianal abscess undergoing surgery in the form of Incision and Drainage, irrespective of comorbidities, age and gender.
(b) Exclusion criteria: patients with perianal abscess for whom pus was not sent for culture and sensitivity / those managed on outpatient basis

RESULTS:

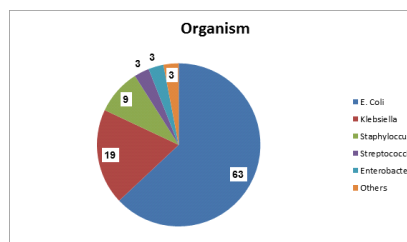
Out of 100 patients with culture showing growth of organisms, 73 were male while 27 were female.



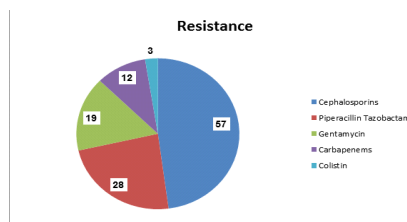
Presenting complaints included pain in the perianal region in 100% of patients, swelling in the perianal region in 83% of the patients, and fever in 40% of the patients.

26% of the patients had associated Type II Diabetes Mellitus while 14% had Hypertension, 8% had both Type II Diabetes Mellitus and Hypertension.

The most common organism grown in Cultures was E. coli, seen in 63% of the cases, followed by Klebsiella (19%).



57% of patients with growth of organism had resistance to Cephalosporins, while 28% had resistance to Piperacillin-Tazobactam, 19% had resistance to Gentamycin, 12% had resistance to Meropenem and 3% had resistance to Colistin.



2 out of 3 patients with resistance to Colistin had associated Type II DM. There was no significant correlation between resistance to other antibiotics and associated comorbidities.

DISCUSSION:

- Majority of the patients with perianal abscess were male gender (73%).
- 32% of the patients who had perianal abscess had associated comorbidities like Type II Diabetes Mellitus and/or Hypertension.
- Majority of the cases saw growth of Gram negative organisms in Culture (E. Coli and Klebsiella sp. = 82% of cases)

- A significant proportion of the patients showed resistance to Cephalosporins on Sensitivity Testing (57%).
- However, there was no significant relationship between antibiotic resistance and associated comorbidities.

CONCLUSION:

Perianal abscess being a common surgical emergency, is frequently encountered in India. It is associated more commonly with lowered levels of immunity, seen in comorbidities such as Type II Diabetes Mellitus.^{[8][10]} It is far more frequent in males as compared to females. Majority of the perianal abscesses are due to gram negative organisms, which demonstrate significant levels of resistance to lower generation antibiotics, frequently requiring higher generations of antibiotics.^[9] However, there is no significant variation in levels of resistance in those with and those without comorbidities. However, surgery in the form of adequate incision and dependent drainage remains the mainstay and gold standard in treatment of perianal abscesses.^{[6][7]}

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