



STUDY OF BACTERIOLOGICAL PROFILE OF GALL BLADDER BILE

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ABSTRACT

Gall stone or cholelithiasis is most common disorder in Indian population and indication for cholecystectomy. It is most common in female of 4th decades and in north Indian than south Indian population. E.coli was the most common microorganism isolated followed by pseudomonas, salmonella typhi, klebsiella, hemolytic streptococci, staphylococcus epidermitis.

KEYWORDS :**Introduction:**

Gall stone disease is most common disorder among Indian population. Cholecystectomy is among the commonest operation done in surgery. Indications includes cholelithiasis with or without cholecystitis. Bile of healthy human being is bacteriologically sterile. Clinically inapparent bacterial contamination is apt to occur due to biliary outflow obstruction, presence of gall stone and is responsible for post operative morbidity. Present study was done to evaluate the magnitude of positive bacterial culture in gallbladder bile obtained from the cholecystectomy samples.

Materials and Methods:

From 60 cases undergoing cholecystectomy (from June 2016 to December 2016) in surgery department of Patna Medical college Hospital, Patna. Bile was obtained in sterile container immediately after operation and sent to microbiology department. Inoculation was done in Robertson's cooked meat broth, MacConkey's agar and blood agar plates and incubated at 37 degree C for 48 hours aerobically. Absence of growth after 96 hrs was declared sterile. After smear examination additional cultures were done on selective media whenever required.

Results:

Average age of patient was 37.2 years range 12 to 64 years. Highest incidence was in 4th decade. Female : male ratio was 3:1. Out of 60 cases studied 43 had positive culture (71.6%). 40 of these positive cases were associated with cholelithiasis. 8 cases (13.3%) had empyema. Majority (72%) of the positive cultures were found in patients above 40 years of age. Bacterial isolates were E.coli (20 cases -46.5%), pseudomonas (8 cases -18.6%), salmonella typhi (5 cases -11.6%), klebsiella (4 cases -9.3%), Hemolytic streptococci (3 cases -7%) Staph. epidermitis (2 cases -4.6%) and Cl. Welchii (1 cases -2.3%) 12 cases had poly bacterial growth 7 of them had recurrent jaundice and fever.

Discussion:

Our patients decide to undergo cholecystectomy only after they suffer repeated attacks of biliary colic and cholecystitis as also found by Sharma V. et al (2007).

E coli was the commonest micro organism isolated. Similar findings were reported by Manoj Kr Sahu et al (2011), V. Sakar et al Endoscopy (1986) and Sharma V. et al (2007). 28% of cultures were poly bacterial as also reported by V.sakar et al, Sharma v. et al. History of recent jaundice and diabetes in 10 cases was uniformly associated with polybacterial cultures. Post operative wound infection was found in 5 cases, all of them had bactobilia. Infection was thought to play least, if any role in cholelithiasis.

To summarise, bactobilia is a frequent accompaniment of

cholelithiasis & cholecystitis, which may be clinically apparent, but is responsible for post operative morbidity.

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