



CLINICAL PROFILE OF PERITONEAL DIALYSIS ASSOCIATED PERITONITIS - A TERTIARY CARE CENTRE EXPERIENCE

WCN25-
AB-2397

Theme: The Kidney Losing Function

Topic: Peritoneal Dialysis

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INTRODUCTION

- Peritonitis remains a serious complication in Continuous ambulatory peritoneal dialysis (CAPD) patients and an important cause of drop-out from the program.
- Peritoneal dialysis -associated peritonitis is associated with substantial morbidity, increases treatment costs and hospitalization events and is a primary reason for transition to hemodialysis.

AIM

- To determine the incidence of infective peritonitis including microbiological spectrum and assess clinical outcome following infective PD peritonitis.

METHODS

- All patients (n=150) on CAPD followup between January 2020 and June 2024 were included in the study.
- It is a retrospective observational study.
- Clinical characteristics of patients, occurrence of peritonitis episodes, risk factors, microbiological spectrum of organisms involved and outcomes were analysed.
- Culture of peritoneal fluid was done by automated culture (BACTEC)

RESULTS

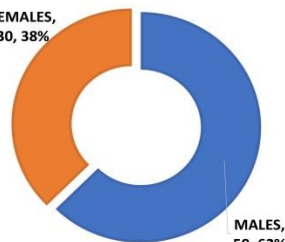
- Overall 96 peritonitis episodes occurred during the study period (80 patients). PD peritonitis rate was 0.34 episodes per patient year. 62 % of patients were male, 38 % were female. Mean age was around 39.92 ± 15.07 years. Mean duration of first peritonitis was 8 months.
- Cumulative culture positive was found in 90.5%. Mixed organisms in culture were common 28% (gram negative organism involvement in 80.9%, gram positive organism in 36.5%, Fungal 9.5%, Tubercular 4.8%).
- Predominant gram negative organisms were Acinetobacter (n=13), Pseudomonas(n=13), Alkaligenes faecalis 12. Most common gram positive organism was Coagulase negative staphylococcus aureus. In fungal spectrum, candida was common (n=5).
- Breach in technique was found to be associated with peritonitis (86%) leading to catheter removal in 32 patients (40%).
- Other common risk factors were change in caregiver (7%) and gastroenteritis / constipation (7%). Refractory peritonitis occurred in 22.5% (n=18). Mortality occurred in 11.25% patients (n=9).

150 PATIENTS

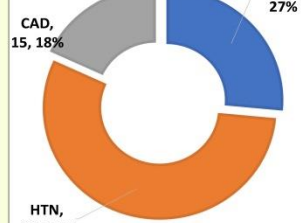
JAN 2020 - JUNE 2024

80 PATIENTS WITH PERITONITIS

FEMALES,
30, 38%



MALES,
50, 62%



96 EPISODES

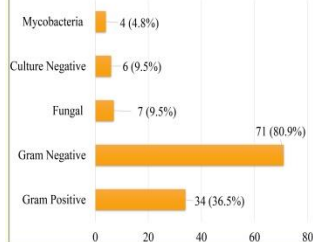
- 80 SINGLE EPISODE
- 16 MULTIPLE EPISODE

MEAN AGE - 39.92 ± 15.07 YEARS

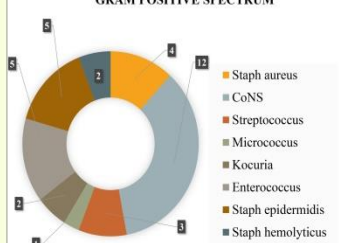
MEDIAN DURATION TO FIRST PERITONITIS -
8.5 MONTHS (IQR 2-12.5)

CUMULATIVE CULTURE POSITIVITY 90.5%

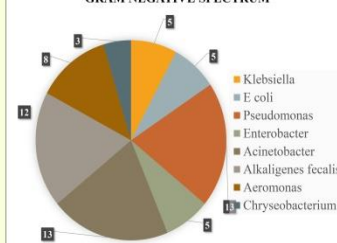
MICROBIOLOGICAL SPECTRUM



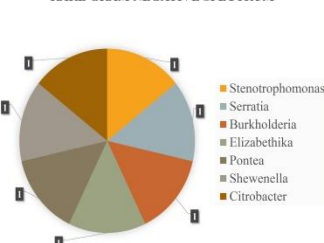
GRAM POSITIVE SPECTRUM



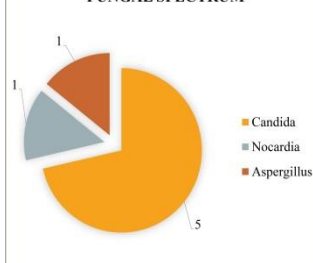
GRAM NEGATIVE SPECTRUM



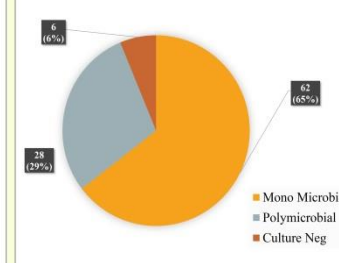
RARE GRAM NEGATIVE SPECTRUM



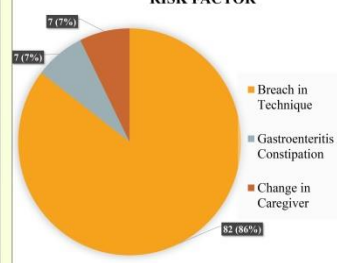
FUNGAL SPECTRUM



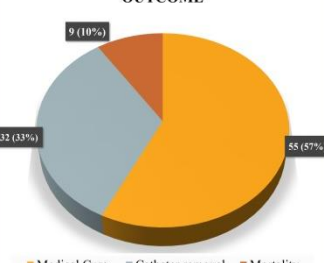
MONO/MIXED SPECTRUM



RISK FACTOR



OUTCOME



CONCLUSION

- Proper training of caregiver in performing exchanges is prudent to prevention of peritonitis episodes as a breach in technique is the major predisposing factor in our patients.

REFERENCES

- K.N. Prasad et al 2002-2011 SGPPI, lucknow.
- Georgi Abraham et al 2010-2011 Multicentre study.
- Vivek sood et al 2015-2018 PGI