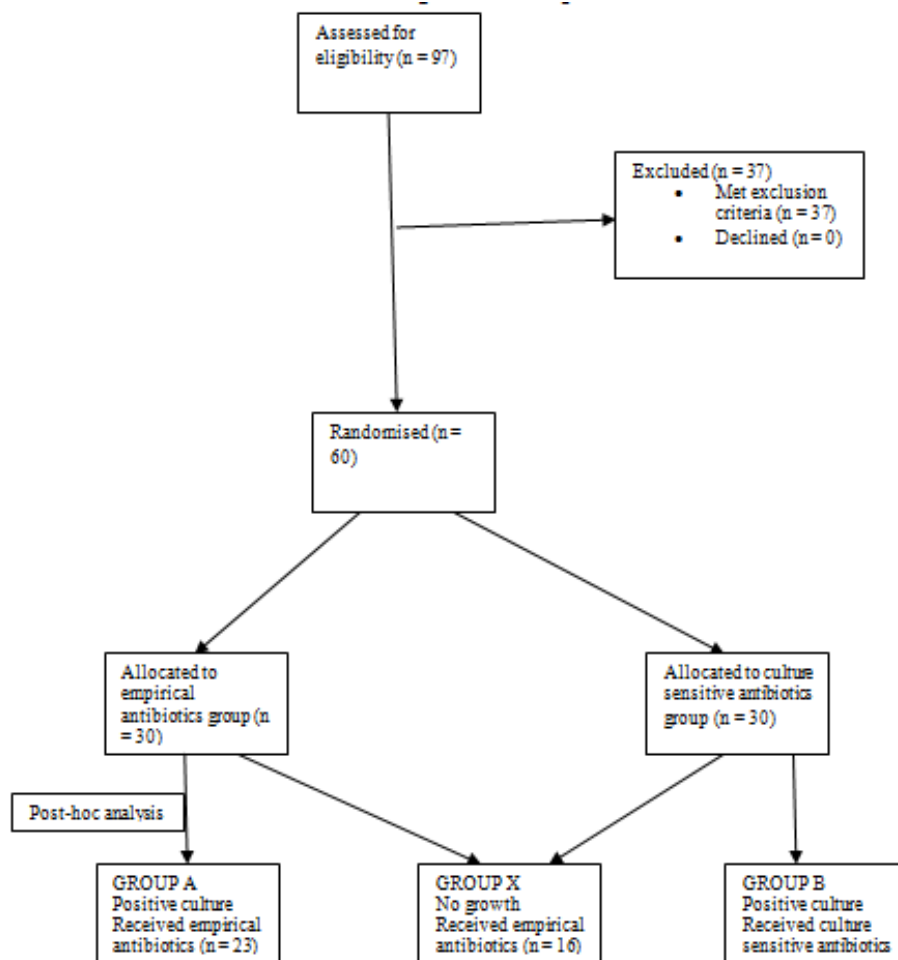


Baseline characteristics

A prospective randomised clinical study was conducted among 60 patients who had secondary peritonitis and gave consent to participate. Five millilitres of peritoneal fluid was sampled intra-operatively and microscopy, culture and sensitivity testing for aerobic and anaerobic isolates were performed on these samples. The patients were randomised into two groups. Both groups had antibiotics administered for seven days. The first group had empirical antibiotics throughout (Ceftriaxone + Metronidazole) while the second group had empirical antibiotics (Ceftriaxone + Metronidazole) for the first two days, and antibiotics according to peritoneal fluid culture and sensitivity report for the remaining five days. Post-hoc analysis was done on a third group, who even though were randomised to either groups, had no growth on culture of peritoneal fluid but had significant differences in characteristics and outcome.

Participant flow



Outcome measures

The commonest pathogens identified from the peritoneal culture of the participants are *Escherichia coli*, *Klebsiella pneumonia*, *Anaerococcus* group and *Bacteroides fragilis*. The antibiotics combination regimen with the strongest efficacy against all pathogens isolated in this study are Vancomycin + Metronidazole, and Meropenem + Metronidazole.

Outcome measures such as need and duration of ICU stay, ventilatory and inotropic support were worse in those who received empirical antibiotics compared to those who received culture-sensitive antibiotics.

Adverse events

Adverse events such as superficial incisional surgical site infection (SSI), deep incisional SSI, organ/space infection, enterocutaneous fistula and wound dehiscence were also significantly higher in those who received empirical antibiotics. Mortality was also higher in this group.