

COMPARISON OF TWO ANTIBIOTICS USED IN PROPHYLAXIS OF POST CAESAREAN SECTION INCISIONAL WOUND INFECTIONS

A. GUNARATHNE¹, T.N. C ATHURALIYA¹, K. GUNAWARDANE², V. WALPOLA¹
AND S. WASGEWATTE¹

¹*Department of Pharmacology, Faculty of Medicine, Peradeniya and* ²*Teaching Hospital, Peradeniya*

Use of prophylactic antibiotic therapy in preventing elective post caesarean section wound infections (PCSWI) is a well-established practice. However, there are no published therapeutic guidelines in this regard. Therefore, Obstetricians use different regimens based on other parameters such as spectrum of activity, availability and experiences.

It has been observed that in an obstetric unit at Teaching Hospital Peradeniya, two antibiotics are commonly being used. Identification of the efficacy of the two antibiotics in prophylactic therapy is important for future practices. Therefore, a study was undertaken to compare the efficacy of the two drugs in one of the Obstetrics Units at the Teaching Hospital, Peradeniya. The objective was to compare the efficacy of the two antibiotics in preventing postoperative incisional wound infections.

The study was carried out as a double blind control clinical trial from 1 December 2002 to 15 February 2003. Those mothers with uncomplicated pregnancies admitted for elective caesarian section were considered for the study. Every pregnant mother in the age group of 18-35 years, having a BMI between 18 and 30, completed their gestation of 37 weeks and who have undergone an elective caesarean section was included.

The two drugs compared were a broad spectrum antibiotic, co-amoxiclav, and a cheap and freely available antibiotic, gentamicin. As per the standard practice, the antibiotics assigned for the patient was given immediately after the delivery of the neonate. In the study sample, every other patient received either the antibiotic co-amoxiclav (1.2g) or gentamicin (80mg) administered intravenously by the anaesthetist.

Inspection for wound infection was carried out by using internationally accepted ASEPSIS wound assessment scale. Fisher's exact test was applied using SPSS for the analysis of data.

The total sample size was 72 mothers of whom 40 received gentamicin and 32 received co-amoxiclav. Age distribution of those who received gentamicin was 20-36 years. Parity of the study population ranged from P1-P5. As per the score, 17.5% treated with gentamicin and 12.5% treated with co-amoxiclav, showed infected wounds. This difference was not statistically significant ($P=0.744$).

This study has shown that there is no added benefit of using co-amoxiclav, over gentamicin, to prevent PCSWI.