

## Antibiotics in Labour at Term: An Audit

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This trend was inverse in the non-GBS antibiotics group (Figure 1). Of the 13 women indicated for triple IV antibiotics, 8 received triple IV antibiotics, 3 received ampicillin and gentamicin IV but oral metronidazole, 2 received only two antibiotics IV. The women with PROM received ampicillin or gentamicin and metronidazole.

Of the febrile patients, 3 commenced the sepsis pathway, 11 had maternal lactates collected and 6 were elevated. Twelve women had blood cultures and 1 woman had a urine culture, all were negative. Of 12 placental swabs, 3 were GBS positive in women negative at screening, 1 grew E.coli and GBS in GBS positive woman and 1 grew Streptococcus Anginosus. Placental histopathology demonstrated inflammatory change in all 12 samples and some degree of chorioamnionitis in 10.

One woman was readmitted with endometritis and treated with IV antibiotics. One presented with a caesarean wound infection, treated with oral antibiotics as an outpatient. One neonate had suspected GBS sepsis and received 7 days of IV antibiotics over 2 nursery admissions. Another neonate received 36 hours of IV antibiotics for sepsis risk.

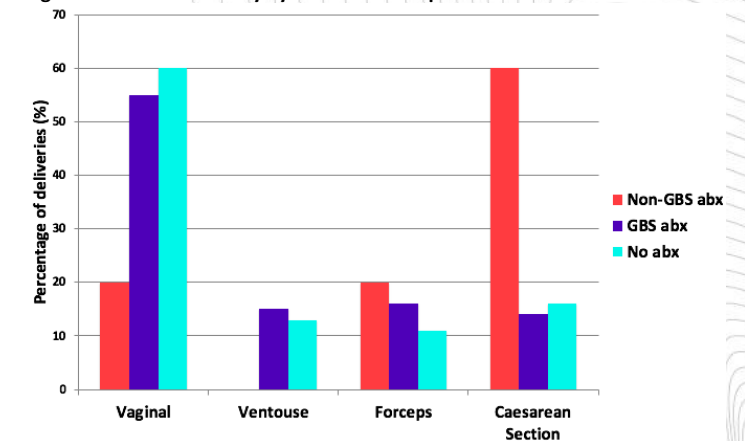
Table 1: Hospital Policies for Antibiotics in Labour

Indication	Antibiotics	Investigations
GBS	Benzyl Penicillin 3g, then 1.8g q4 hr	N/A
Chorioamnionitis	Ampicillin 2g IV q6hr Metronidazole 500mg IV q12hr Gentamicin 5-7mg/kg pre-pregnancy weight IV stat	Blood cultures if febrile HVS MCS Urine MCS
Intrapartum fever (1 ≥38°C or 2 >37.5°C)	Ampicillin 2g IV q6hr Metronidazole 500mg IV q12hr Gentamicin 5mg/kg pre-pregnancy weight IV stat	Sepsis pathway FBC, EUC, CRP, lactate Blood cultures, LVS & Urine MCS, consider other investigations

Table 2: Maternal Characteristics by Antibiotic Group

	Non-GBS Antibiotics n=15	GBS Antibiotics n=87	No antibiotics n=581
Age (median, range) years	33 (19-39)	33 (23-42)	34 (19-47)
Parity (median, range)	0 (0-1)	0 (0-3)	0 (0-5)
ROM duration (median, range) hours	13.97 (3.87-46.80)	10.2 (0.45-45.08)	6.7 (0-179.2)

Figure 1: Mode of Delivery by Antibiotic Group



## Conclusion

This audit demonstrates that women infrequently require antibiotics in labour for non-GBS indications. The number of sepsis related complications in these women or their neonate is similarly low. Management of antibiotics in labour can be improved by ensuring administration of triple IV therapy and completion of the sepsis pathway and investigations. Education regarding hospital policies for antibiotics in labour could improve compliance and potentially increase pathology yield to target antibiotic therapy and reduce complications.