Proven bacterial or fungal infection in the first week of life

New Zealand Paediatric Surveillance Unit

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REPORTING CLINICIAN

1. Dr Code/Name __ __ __ __ …… 2. Month/Year of Report …..… / ……

PATIENT

3. First 2 letters of first name __ __ 4. First 2 letters of family name __ __
5. Date of Birth: __ __/ __ __ /__ __ 6. Gender (M = male, F = female) __
   (day/month/year)
7. Maternal ascribed ethnicity __ 1 = Maori, 2 = Pacific, 3 = European, 4 = Other ethnic groups

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If this patient is primarily cared for by another physician who you believe will report the case, please complete the questionnaire details above this line and return by e-mail/mail with your name+address. Please keep the patient's name and details in your records. If no other report is received for this child we will contact you for the full information requested in the questionnaire.

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8. **MATERNAL SOCIODEMOGRAPHIC DATA**:

a. Age (yrs) __ __ b. Parity (G_xP_y) *include this preg* G __ P __

c. Any previous infants had GBS infection? Yes / No / DK

d. Ethnicity __ 1 = Maori, 2 = Pacific, 3 = European, 4 = Other ethnic groups

9. **PREGNANCY AND LABOUR**

a. Gestation (wks) __ __ b. Birth (1 = normal vaginal, 2 = forceps, 3 = Ventouse, 4 = C-section) __

c. Risk factors present for early onset sepsis (Y = yes, N = no, DK = don't know)

i. Pre-term delivery (< 37 wks gestation) __ ii. Membranes ruptured >18h __

iii. Maternal fever (> 38^0C) intrapartum __ iv. Maternal chorioamnionitis * __

v. Invasive intrauterine monitoring __ vi. Multiple gestation __

vii. GBS bacteriuria this pregnancy † __ viii Prior GBS-affected baby † __

ix. +ve antenatal cultures for GBS taken within 5-weeks of delivery † __

*** maternal chorioamnionitis = intrapartum fever with ≥ 2 of the following signs: fetal tachycardia, uterine tenderness, offensive vaginal discharge, or maternal leucocytosis) † group B streptococcus.**

d. GBS intrapartum antibiotic prophylaxis

i. Does the LMC follow a GBS prevention protocol? (Y / N / DK) __

ii. If yes to (i), does the LMC's protocol rely primarily upon:
1 = +ve GBS cultures, 2 = Clinical risk factors __

iii. If yes to (i), did the mother qualify for prophylaxis? (see accompanying sheet) __

iv. What parenteral antibiotics were used (if any)? (can report more than one)
0 = none, 1 = penicillin, 2 = amoxycillin, 3 = amoxycillin-clavulanate, 4 = cefuroxime, __ __
5 = cephalothin/cephazolin, 6= ceftriaxone/cefotaxime, 7 = erythromycin, 8 = clindamycin, __ __
9 = gentamicin, 10 = vancomycin, 11 = other (state) _____ __ __

v. If yes to (iii) above, how many doses of intrapartum antibiotics did the mother receive? __
(eg. 0, 1,2 or 3)

vi. Did the woman receive oral antibiotics immediately before or during labour? __
If yes, name antibiotic and its indication (if known) _____

10. **BABY**

a. Neonatal unit __ __
(1 = Auckland City Hospital, 2 = Middlemore, 3 = Waikato, 4 = Wellington, 5 = CHCH, 6 = Dunedin, 7 = Whangarei, 8 = North Shore, 9 = Waitakere, 10= Tauranga, 11 = Rotorua, 12 = Whakatane, 13 = Gisborne, 14 = New Plymouth, 15 = Hastings, 16 = Wanganui, 17 = Palmerston North, 18 = Lower Hutt, 19 = Nelson, 20= Blenheim, 21 = Timaru, 22 = Invercargill)

b. Baby transferred in-utero __ (Y / N)

c. Baby transferred after birth from another hospital (Y/N) __ (if yes, from where?_____)

d. Estimated gestation (wks) __ __

e. Birth weight (grams) __ __ __ __

f. Age at onset of symptoms of sepsis and/or meningitis (hrs)* __ __ __

g. Age when positive culture obtained (ie when taken, not when grew) (hrs) __ __ __

h. Was there accompanying pneumonia? (Y / N)# __

* Sepsis = growth of bacteria from normally sterile sites (eg. blood or pleural fluid). The infant must be clinically unwell and have supportive evidence for sepsis - eg. abnormal peripheral white blood cell counts, thrombocytopaenia or raised serum c-reactive protein. Meningitis = consistent clinical picture, and either a +ve culture in the CSF, or a +ve blood culture **and** a raised CSF ($\geq$ 100 x 10^6/L) white blood cell count. # For this study, pneumonia = respiratory distress, +ve blood/pleural cultures and CXR opacity.

11. **MICROBIOLOGY**

a. Positive microbiology culture from normally non-sterile sites (Y / N)

i. Blood __ ii. CSF __ iii. Pleural fluid __ iv. Urine (SPA/cath) __ v. Urine GBS antigen +ve __

b. Lumbar puncture performed (Y / N / DK) __
   i. If yes to lumbar puncture,
      a. Total white blood cell count in CSF (x 10^6/L) __ __ __ __
      b. Total red blood cell count in CSF __ __ __ __ __ __
      c. Gram stain result (1 = g+ve cocci, 2 = g+-ve bacilli, 3 = g-ve cocci, 4 = g-ve bacilli, 5 = -ve, 6 = not done) __
      d. GBS antigen (1=+ve, 2=-ve, 3=not done, 4=DK) __

c. Bacterial pathogen __ __
(1 = GBS, 2 = *S. aureus*, 3 = MRSA, 4 = *S. pneumoniae*, 5 = *enterococcus*, 6 = other *streptococci,* 7 = *E. coli*, 8 = *Klebsiella,* 9 = *Pseudomonas aeruginosa*, 10 = *Enterobacter,* 11 = *Listeria monocytogenes*, 12 = *Enterobacter sakasakii** *13* = Other (state _____)

*If yes to 12, was the infant fed with a powdered milk formula ? (Y /N / DK) __ If yes, name _____

d. If GBS isolates (Y / N / NA) Has your local laboratory:

i. stored a GBS isolate from this patient? __ ii. Sent the GBS isolate to ESR at Porirua? __

e. If *E. coli* or other gram –ve bacillus, is it resistant to these antibiotics (Y / N / DK / NA)

amoxycillin __ cefuroxime or cefotaxime __ gentamicin __

12. **INFANT OUTCOMES**

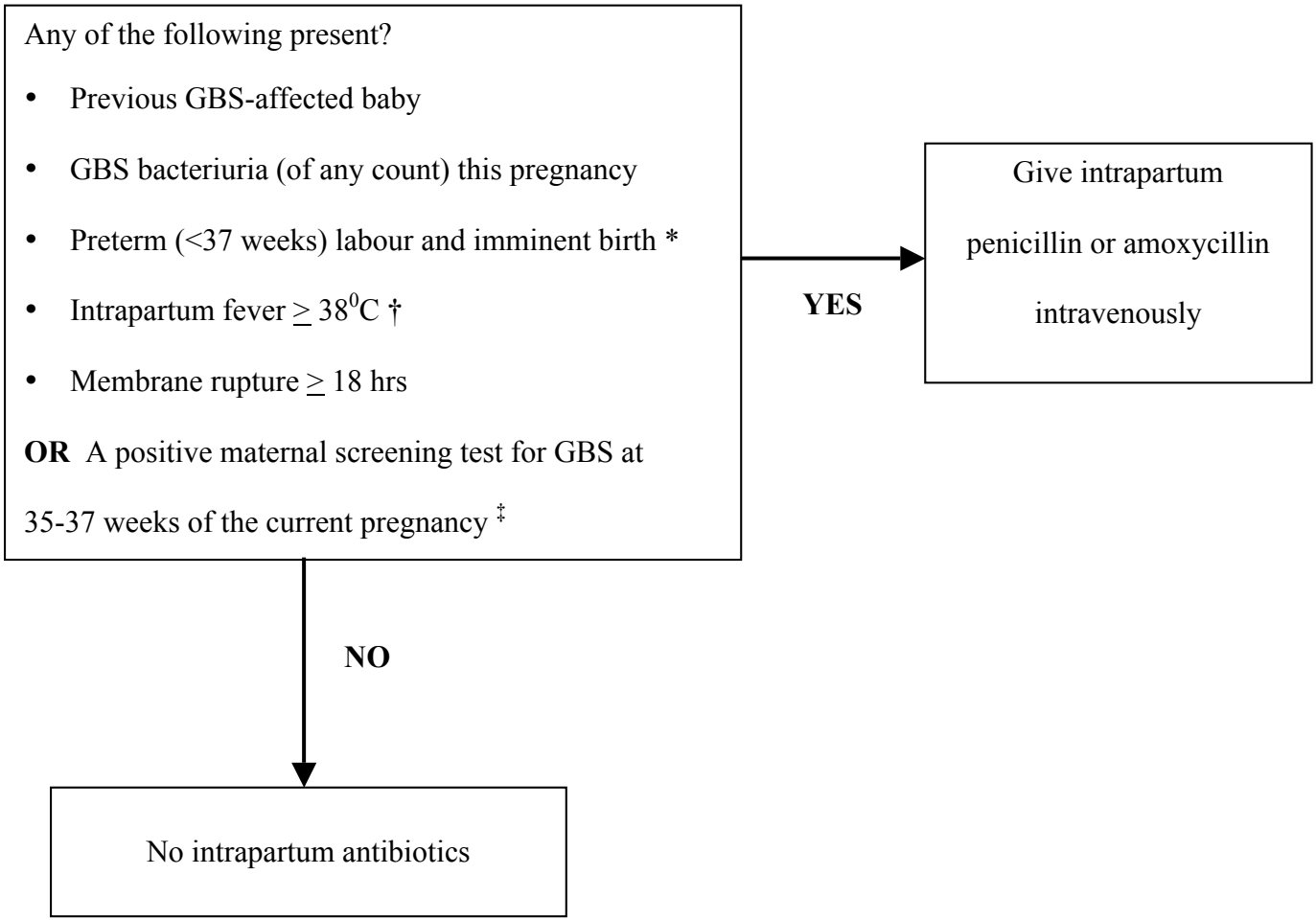
a. 1 = survived, 2 = died, sepsis as the primary cause, 3 = died, with sepsis as a contributory factor, 4 = died from unrelated causes __

b. Head ultrasound (1 = normal, 2 = abnormal, 3 = not done) __
If abnormal, specify _____

c.. Length of hospital stay (days) __ __ __

13. **ADDITIONAL COMMENTS** (if any)

GBS PREVENTION PROTOCOLS (risk or culture-based)



***** Except in women with intact membranes undergoing pre-labour elective caesarean section and who lack other GBS risk factors.

† If chorioamnionitis is suspected, GBS chemoprophylaxis is insufficient and aggressive treatment with broad-spectrum antibiotics is required.

‡ Optimal antenatal GBS screening requires collection of anogenital swabs at 35-37 weeks gestation and a selective broth incubation step. Intrapartum antibiotics are **not** indicated when a GBS culture positive woman with intact membranes undergoes pre-labour elective caesarean section. Similarly, intrapartum chemoprophylaxis is **not** required for culture negative women **(after optimal screening at 35-37 weeks gestation)**, regardless of intrapartum risk factors. **All women with a previously GBS-affected baby or GBS bacteriuria in the current pregnancy are offered intrapartum antibiotics and do not need to undergo antenatal culture screening.**

(NZ Med J 2004; 117 (1200) URL: http//www.nzma. org.nz/journal/117-1200/1023)