

Tattoos in pregnant women; an important clinical sign

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Tattoos are strongly associated with low self-esteem, borderline and anti-social personality disorders, alcohol and psychoactive substance abuse and dependency.¹ Tattooed individuals are frequently reported to be at high risk of Hepatitis B infection, with seropositivity rates of up to 16% in some series^{2,3}. This is due to both the practice of tattooing itself and the subculture association with intra-venous drug abuse.³ The risk of HIV infection from tattooing alone is significantly less than for Hepatitis B due to the extracorporeal fragility of the virus, the inoculum size and the solid, non-bevelled character of both home-made and professional tattoo needles.⁴

Over a 12 month period, 52 mothers with tattoos were identified on the post-natal wards of the Rotunda Hospital, Dublin (prevalence: 0.9%). In 48 cases (92.3%) the tattoo was self-made. To-date nothing has been written about the relevance of this common sign in pregnancy.

Table 1 - Indications for caesarean section in mothers with tattoos

Elective		
Two or more previous caesarean sections	2	
Nulliparous breech	2	
Intra-uterine growth retardation	2	
Non- elective		
Fetal distress in labour	3	
Dystocia	3	
Abruption placentiae	2	
Poor biophysical score	1	

The mean age of tattooed mothers was 23 years (range 16-32). The mean parity was 2.7 (range 1-7); 18 were primiparae. Thirty-six (69.2%) were un-married; 51 were from social classes IV and V and seven (13.5%) had a prison record. Forty-one (78.8%) smoked cigarettes and 35 (67.3%) drank alcohol during pregnancy; 5 (9.6%) had a history of opiate abuse, one of whom continued to abuse during the pregnancy.

Eight (15.4%) had HIV and hepatitis B serology testing; all were negative. In addition all 52 had negative syphilis serology. Caesarean section was performed in 15 patients (28.8%, table 1); the hospital rate during this period was 12%. Seven infants (13.5%) were born at less than 37 weeks and eight (15.3%) were born weighing less than 500g, the hospital rates being 5.7% and 6.1% respectively. Nine infants (17.3%) were transferred to the NICU (Table 2); the hospital rate of transfer was 10.8%. Two infants (3.8%) were stillborn, one due to abruption placentae at 36 weeks and one unexpectedly at 38 weeks; both were appropriately grown; the hospital perinatal mortality rate for infants weighing 2500g or more was 0.9%. There were no seizures among the group of infants born to tattooed mothers.

Table 2 - Indications for transfer to NICU

Prematurity/low birth weight	4
Low apgar score/low cord pH (term infants)	2
Necrotizing enterocolitis (term infants)	1
Transient tachypnoea of the newborn	1
Opiate withdrawal	1

A tattoo on a pregnant woman is a significant clinical finding. These mothers and their infants are at higher than average risk of adverse outcome. Although this fact is intuitively recognized by most clinicians, the relevance of this important sign is not yet part of standard bedside or textbook teaching.

References

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