

P37 Labour outcome of low-risk multiparas of forty years and older. A case-control study

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Methods: Between January 1, 1994 and December 31, 1997 a total of 76 low risk multiparas of 40 years and older with spontaneous onset of labour were compared with 152 younger (25-30 years old) low risk multiparas of similar parity in a case-control study. The labour and perinatal outcomes of the two groups were compared.

Results: The duration of the first stage of labour was longer (233 minutes versus 149 minutes, $P < 0.0005$) in the older women. Significantly more older multiparas were complicated by intrapartum fetal distress (6.6% versus 1.3%, $P < 0.05$); received intramuscular analgesia (11.8% versus 2.6%, $P < 0.01$); and had operative deliveries (17.1% versus 4.6%, $P < 0.01$). The incidence of instrumental delivery (11.8% versus 3.9%, $P < 0.05$) and Caesarean section (5.3% versus 0.7%, $P < 0.05$) were higher among older multiparas. The incidence of syntocinon augmentation, prolonged second stage of labour, episiotomy and third stage complications such as perineal tear, primary postpartum haemorrhage, and retained placenta were similar in both groups. Both groups had similar perinatal outcomes.

In conclusion: low-risk advanced age multiparas with spontaneous labour were at higher risk of fetal distress and operative deliveries. These women should be treated as the other high-risk pregnancies with appropriate precaution, such as continuous fetal heart monitoring and cross-matching during labour. These women should be counselled and made aware of the increased risk during labour.

P38 In utero pleuro-amniotic shunting in fetuses with chylothorax

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Introduction: Pleural effusion occurs in 1 per 10,000 deliveries. Chylothorax with or without hydrops fetalis, the commonest cause of isolated pleural effusion in neonates, is associated with high perinatal mortality due to pulmonary hypoplasia. We present 4 fetuses with chylothorax managed with *in utero* pleuro-amniotic shunting in the past 14 months at Kwong Wah Hospital.

Procedure & results: All fetuses had diagnostic thoracocentesis and Fetuses 1 & 4 showed prompt re-expansion of lungs. Three of the fetuses had 'double pigtail' catheter and one had double-flower' catheter inserted. All the procedures were performed under local anaesthesia without sedation of the fetus. Prophylactic tocolytics was not given. All the drains remained *in situ* until delivery. Obstruction by vernix occurred in one of the 'double-flower' catheter and one retained catheter required removal with local anaesthesia postnatally. One intrauterine death occurred 1 day after the procedure. Early neonatal death occurred to Baby 2 with clinical features of pulmonary hypoplasia. The other two survived and remained well at 2 and 15 months of age.

Fetus	Site	Lymphocyte count in effusion (%)	Hydrops Fetalis	Umbilical		Gestation (weeks) at		Outcome	
				Vessel Doppler		Diagnosis	Shunting Birth		
1	R	99	No	Normal		29	29+	36	Alive; well
2	R+L	99	Yes	REDF; PUV		32	32+	33	Early NND
3	R+L	94	Yes	REDF; PUV		27+	28	31	IUD
4	R+L	99	Yes	Normal		30+	31	35	Alive; well

REDF: reverse end-diastolic flow in umbilical artery

PUV: pulsatile intrahepatic umbilical vein

NND: neonatal death

IUD: intrauterine death

Discussion: In the fetus, pleural effusions are nonspecific collections. Establishing the underlying aetiology is of paramount importance as this will determine the prognosis and the treatment modalities offered. Although being controversial as diagnostic finding for fetal chylothorax, the four fetuses presented here pleural lymphocyte counts of >80%. Structural abnormalities were excluded by detailed ultrasonography. Chromosomal analysis and infection screening were negative. Pleuro-amniotic shunting is a selective *in utero* intervention. The purpose for shunting is to reduce pulmonary compression and the secondary pulmonary hypoplasia and hydrops fetalis. Risk and benefit considerations should include the technical difficulties involved, the gestational age, the procedure related complications and mortality.

Conclusion: From our experience, prompt re-expansion of lung during prior thoracocentesis appeared to be a good prognostic sign. On the contrary, hydrops and abnormal Doppler at presentation seemed to predict an irreversible compromised state. These will add to our selection criteria before *in utero* intervention.