RECURRENT GESTATIONAL HYPERTRIGLYCERIDEMIA INDUCED PANCREATITIS IN PREGNANCY

TAN Ilka ¹, JUNG Jacqueline ², TAN Toh Lick ^{2, 3}

¹ Department of Maternal and Fetal Medicine, ² Department of Obstetrics and Gynaecology, KK Women's and Children's Hospital, Singapore

³ Obstetrics and Gynaecology, Thomson Women's Clinic (Jurong East), Thomson Wellth Clinic, Singapore

Introduction

Gestational hypertriglyceridemia is a rare but potentially serious condition in pregnancy. It can lead to acute pancreatitis with high maternal and fetal morbidity and mortality. It is associated with preterm delivery and has a high recurrence rate in subsequent pregnancies. We present a case report and literature review of recurrent gestational hypertriglyceridemia leading to acute pancreatitis in pregnancy.

Case report

Madam A is a 26 year old Para 1 with a previous emergency caesarean section at 34 weeks for acute pancreatitis due to gestational hypertriglyceridemia. In her second pregnancy, she was booked at another hospital and transferred her care to our institution at 30 weeks gestation. She was admitted at 33⁺² weeks with acute pancreatitis due to gestational hypertriglyceridemia (figure 1). Following her emergency caesarean section her recovery was uncomplicated. Her triglycerides returned to almost normal levels at her 2 months follow up.

Table 1: Review of reported recurrent gestational hypertriglyceridemia leading to acute pancreatitis in pregnancy		Wong ¹	Basar ²	Safi ³	Abu Musa ⁴	Takaishi ⁵	Saadi ⁶	Mizushima ⁷
Antenatal prophylaxis	Diet restriction				✓	✓		✓
	Omega 3 fatty acid			✓		✓		
	Fenofibrate 200 mg				✓			
	Gembibrozil						✓	
	Rosuvastatin 10 mg			✓				
	MCT							✓
	Niacin 500 mg qds				✓			
	Aspirin 325 mg			✓				
Acute treatment	Intravenous fluids	✓	✓		✓			
	Diet restriction	✓	✓					
	Omega 3 fatty acid	✓	✓					
	Plasmapheresis		✓	✓				
	LMWH		✓					
	MCT	✓						
	Insulin	✓						
Recurrence, GA		22	23	28	28	-	-	-
Delivery, GA		36	37	35	29	37	Term	36

MCT = medium chain triglycerides; LMWH = low molecular weight heparin, GA = gestational age, weeks

Literature review

Our literature search identified 7 cases (Table 1). In women who did not have antenatal prophylactic treatment, all had recurrence (n = 2). This risk appears to be dramatically reduced to 2 in 5 if they had antenatal prophylactic treatment. Of those with recurrence, early diagnosis and aggressive acute treatment appears to increase recurrence to delivery interval.

Conclusion

- Pregnant women with history of gestational hypertriglyceridemia induced acute pancreatitis may benefit from the following:
- Pre-conception counselling and institution of non-pharmacologic intervention such as diet and exercise
 - Multidisciplinary team management including dietician to counsel and encourage a fat restricted diet
 - Consider the use of lipid lowering agents such as fibrates and omega-3 fatty acids after the first trimester
 - Regular monitoring of lipid levels in pregnancy particularly in the third trimester. Aim for triglycerides <500 mg/dl
 - Consider hospital admission in the third trimester for further intensification of dietary fat restriction
 - When triglycerides rise >1000mg/dl, consider fasting with parental nutrition and plasmapheresis

All these interventions aim to avoid recurrence of acute pancreatitis and to prolong pregnancy to minimize premature delivery. Further research is needed to determine the optimal treatment of this rare but important pregnancy induced condition.

References

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Figure 1: Pink lipaemic peritoneal fluid in our case study with acute pancreatitis complicating gestational hypertriglyceridemia