

# Antenatal Management of Mycophenolate Exposure in Early Pregnancy

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## BACKGROUND

Mycophenolate is a disease-modifying anti-rheumatic drug with immunosuppressant properties, for the treatment of autoimmune conditions and transplant recipients. Mycophenolate is strongly teratogenic, and is associated with miscarriage, intrauterine growth restriction, congenital anomalies, and stillbirth. Mycophenolate use in pregnancy requires tertiary review, and multi-disciplinary input regarding associated medical conditions.

## CASE

We present a 41 year old nulliparous female with seronegative generalised myasthenia gravis and ulcerative colitis in her first continuing pregnancy referred to our regional antenatal clinic at 9 weeks for urgent management of unintentional mycophenolate use in early pregnancy. First trimester anatomy ultrasound with Maternal Fetal Medicine (MFM) showed no fetal abnormality.

## AIMS

The aims of this study are to describe a case of mycophenolate use in pregnancy, and demonstrate how prompt multi-disciplinary input optimised the patient's symptoms and overall antenatal course.

## RESULTS

The patient developed recurrence of neuromuscular and gastrointestinal symptoms, which were controlled following prompt review by obstetric medicine, neurology and gastroenterology. Morphology and third trimester ultrasound showed no fetal abnormalities, other than macrosomic fetal biometry. The patient underwent a term induction of labour resulting in emergency caesarean delivery due to non-reassuring fetal heart rate abnormalities. The newborn was well during admission, with no abnormalities or sign of neonatal myasthenia gravis

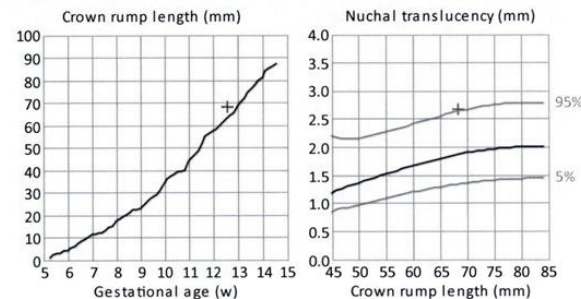
## DISCUSSION

This case highlights the importance of early review of high risk patients by obstetrics, as well as multi-disciplinary medical input for complex medical cases. The case demonstrates the ability for regional centres to provide optimal management through access to reasonably located MFM services, resulting in positive patient experience and outcome.

**FIGURE 1 | Low risk CFTS result**

Sonographer NIPT is low risk.  
Findings Low risk for preeclampsia and fetal growth restriction before 37w.  
Final Diagnosis Combined biochemistry and nuchal translucency risk for Trisomy 21 is low.

A low risk as recommended by Fetal Medicine Foundation is considered less than 1 in 300.



**FIGURE 2 | Normal morphology ultrasound result**

BPD	47.7 mm	69%
HC	172.9 mm	67%
Cerebellum tr	20.7 mm	65%
Nuchal fold	3.8 mm	
AC	164.2 mm	98%
Femur	31.7 mm	50%
Humerus	30.9 mm	53%
Fetal Weight Calculation:		
EFW	364 g	84%

### The following structures appear normal:

Cranium. Brain. Neck. Face. Heart. Thorax. Abdominal wall. GI tract. Urogenital tract. Spine. Arms. Legs. Skeleton.

**Impression:** No fetal anomaly detected. It was explained that a normal morphology scan cannot totally exclude the possibility of all structural anomalies or a chromosomal anomaly.