The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

College Statement
**C-Obs 3**
1st Endorsed: July 1992
Current: November 2009
Review: November 2012

**C-Obs 3**

# Pre-pregnancy Counselling and routine Antenatal Assessment in the absence of pregnancy complications

## Pre-Pregnancy Counselling

### Purpose

All women planning a pregnancy are advised to consult their general practitioner with a view to:

1) detecting any clinical conditions that may be of relevance to the forthcoming pregnancy but are ideally managed prior to pregnancy
2) further assessment of any conditions of relevance and optimising any treatment with respect to the forthcoming pregnancy
3) obtaining general advice regarding personal health care in early pregnancy, in particular, medications, alcohol, X-rays … etc

### Clinical Assessment

Most important is a detailed medical history and clinical examination. The following investigations are recommended:

1) rubella immunity status (if this is unknown)
2) varicella immunity status (if unknown and the patient does not give a clear history of varicella)
3) cervical smear (if clinically appropriate)

### General Advice

All women planning pregnancy should receive advice with respect to:

1) potential teratogens in early embryogenesis (medications, alcohol, X-rays … etc)
2) where and when to attend in early pregnancy
3) vitamin supplementation (particularly folic acid for 3 months preconception)

## First Antenatal Visit in Pregnancy

All women should be advised to attend in early pregnancy with a view to:

1) confirming pregnancy and establishing an estimated date of confinement (albeit that may alter after subsequent ultrasound examinations)
2) a comprehensive clinical assessment in order to determine any clinical conditions that may be of relevance to the pregnancy

3) detailed assessment of any particular conditions or circumstances of relevance and optimising management for pregnancy
4) obtaining general advice regarding common issues of concern in early pregnancy and management of the pregnancy

## Clinical Assessment

As always, of greatest importance is a careful medical history and thorough clinical examination.

The following investigations are recommended (in the absence of specific complications):

### *Full blood examination*

Particular note should be taken of the Mean Corpuscular Volume as a potential indicator of an underlying Haemoglobinopathy

### *Blood group and antibody screen*

Where the blood group has already been performed it does not need to be repeated. However, the antibody screen should be repeated at the beginning of each pregnancy.

### *Rubella antibody status*

All women should have their rubella antibody titre measured for each pregnancy. Although the past antibodies titres from a previous pregnancy screens may have been used to exclude a further antenatal test, there is evidence that levels may decline, particularly following immunization as compared to natural infection. This is particularly so given the low level of wild virus circulating in the community to boost women whose levels may fall below that of protection.

### *Syphilis serology*

Syphilis testing should be performed by screening with a specific treponema pallidum assay for example Treponema pallidum haemaglutination assay (TPHA) or the Treponema pallidum particle assay (TPPT). The non-specific Treponema pallidum assays, such as rapid plasma regain (RPR) test, although cheaper, are less likely to pick up latent infection.

### *Midstream urine*

Examination by culture, e.g. dip slide.

### *HIV*

Before instituting screening for any viral infection in pregnancy, it is imperative that the woman is provided with appropriate counselling as to the limitations of screening for viral infections in pregnancy and the implications of both positive and negative findings.

All pregnant women should be recommended to have HIV screening at the first antenatal visit

### *Hepatitis B serology*

All pregnant women should be recommended to have Hepatitis B screening in pregnancy.

### *Hepatitis C serology*

All pregnant women should be recommended to have Hepatitis C screening in pregnancy. However it is acknowledged that this is a contentious area of practice.

### *Varicella*

Consideration should be given to checking varicella antibodies at the first visit where there is no history or uncertain history of previous illness.

### *Cervical cytology*

A cervical (Pap.) smear should be recommended at the first antenatal visit if this would fall due during the pregnancy, according to cervical screening guidelines. There is no evidence to suggest that a PAP smear in pregnancy is harmful.

## Other tests that may be considered

**1) Screening for Haemoglobinopathies**

Each unit should have a defined policy for screening for haemoglobinopathies, taking into account the ethnic mix of patients screened. As a minimum, all women should be screened with MCV and MCHC. Haemoglobin electrophoresis and iron studies should be performed in the event of thresholds not being reached. Consideration should also be given to the further screening of patients with DNA analysis for alpha-thalassaemia. Testing of normal-MCV women for haemoglobinopathies may be considered if they are members of high-risk groups.

**2) Vitamin D**

Pregnant women at risk for vitamin D deficiency should be tested in early pregnancy OR provided with vitamin D supplementation.

**3) CMV**

Screening for CMV infection in pregnancy is currently not recommended as a routine. (See consensus statement on CMV in pregnancy.)

## General Advice

All women in early pregnancy should be informed with respect to:

1) potential teratogens (medications, alcohol, X-rays … etc)
2) vitamin and mineral supplementation (see college statement)
3) model of care, expected visit frequency, place of booking for confinement, expected costs for both pregnancy and confinement

## Subsequent Visits during the Antenatal Care

All women should be advised to attend in early pregnancy with a view to:

1) early diagnosis of pregnancy complications
2) utilising the principles of preventative medicine to minimise the risk of problems in pregnancy, labour and the puerperium
3) obtaining advice that will assist the woman in preparation for labour, birth and the early puerperium
4) ongoing assessment and treatment of any particular conditions or circumstances of relevance to the pregnancy
5) obtaining general advice regarding common issues of concern in pregnancy

## Clinical Assessment

All women should have a directed clinical assessment at each antenatal visit, with a focus on general well-being and early diagnosis of pregnancy complications. Investigations recommended are:

**1. Obstetric Ultrasound Scan**

All women should be offered an obstetric ultrasound before 20 weeks' gestation. This will include an ultrasound for fetal morphology and placental localization usually at 18-20 weeks gestation. Other scans may be indicated depending on individual circumstances and to assess/confirm dates.

**2. Screening for Down syndrome**

Refer to C-Obs 4 Antenatal Screening for Down syndrome and other fetal aneuploidy, (see link below).

**3. Gestational Diabetes**

Screening for Gestational Diabetes Mellitus is recommended in all pregnant women. The original (1998) ADIPS guidelines are available at: *http://www.mja.com.au/public/issues/jul20/hoffman/hoffman.html*

**4. Group B Streptococcal Disease (GBS)**

Refer to C-Obs: 19 Swabbing for Group B Streptococcus, (see link below).

**5. Blood group antibody testing**

Refer to C-Obs 6 Guidelines for the use of Rh-D immunoglobulin (anti-D) in obstetrics in Australia, (see link below). Further screening is recommended for Rh negative women at approximately 28 weeks gestation. Screening of Rh positive women at 28 weeks gestation is at the discretion of the clinician/managing health service.

**6. Iron deficiency**

The haemoglobin level and platelet count should be repeated at 28 weeks gestation. If anaemia is detected, further investigation is warranted.

**7. Cytomegalovirus/Toxoplasmosis**

Selective testing for cytomegalovirus and toxoplasmosis is recommended only for those women at a substantially increased risk of acquiring an infection. Ideally such patients should be tested prior to pregnancy.

**8. Syphilis**

Syphilis screening should be repeated at 28 weeks in high-risk populations.

**9. Late Pregnancy Tests of fetal well-being**

Late pregnancy tests for assessment of feto-placental function should be performed when indicated on clinical grounds – either through a suspicion of placental insufficiency, a predisposing factor for placental insufficiency or through an inability to clinically ascertain fetal growth (e.g. obesity). Tests of fetal wellbeing should be considered after 41 weeks' gestation. Detailed and frequent assessment of fetal wellbeing, including an assessment of liquor volume, is mandatory in pregnancies at or beyond 42 weeks gestation.

**10. Chlamydia**

Selective testing for Chlamydia should be considered for those who may be at increased risk (e.g. less than 25 years).

## Links to other related College Statements

C-Obs 4 Antenatal screening for Down Syndrome and other fetal aneuploidy

C-Obs 6 Guidelines for the use of RhD immunoglobulin (anti-D) in obstetrics in Australia

C-Obs 7 Diagnosis and management of gestational diabetes

C-Obs 19 Swabbing for Group B Streptococcus

C-Gen 2 Guidelines for consent and the provision of information regarding proposed treatment

C-Gen 3 Hepatitis B

C-Gen 4 Hepatitis C

## Patient Resources

RANZCOG patient information pamphlets:

Antenatal care and routine tests during pregnancy - a guide for women (July 2002)

Prenatal Screening tests for Down syndrome and other conditions (July 2002)

## References


1. Revision of guidelines for the management of gestational diabetes mellitus, Letter to the Editor, J J N Oats and H D McIntyre, MJA September 2004.
   *http://www.mja.com.au/public/issues/181_06_200904/letters_200904_fm-2.html*

2. ADIPS Gestational diabetes mellitus – management guidelines, L Hoffman, C Nolan, J D Wilson, J J N Oats and D Simmons, MJA 1998; 169: 93-97.
   *http://www.mja.com.au/public/issues/jul20/hoffman/hoffman.html*

3. Antenatal Care: Routine care for the healthy pregnant woman, NHS and NICE October 2003.
   *http://www.rcog.org.uk/resources/Public/Antenatal_Care.pdf*

4. Munns C, Zacharin MR, Rodda CP, Batch JA, Morley R, Cranswick NE, Craig ME, Wayne S, Cutfield WS, Hofman PL, Taylor BJ, Grover SR, Pasco JA, Burgner D and Cowell CT. Prevention and treatment of infant and childhood vitamin D deficiency in Australia and New Zealand: a consensus statement. MJA 2006: 185 (5) 268-272.
   *http://www.mja.com.au/public/issues/185_05_040906/mun10153_fm.html*