

Bile acids

Pseudonyms: Serum bile acid (SBA); Total bile acids (TBA).

For the investigation of obstetric cholestasis (OC)

Bile acids should only be requested for the investigation of pruritus (itching) in pregnancy to establish a diagnosis of obstetric cholestasis (OC), also known as intrahepatic cholestasis of pregnancy (ICP). OC is a multifactorial condition characterised by severe pruritus in the absence of skin rash which usually, but not exclusively, occurs in the third trimester of pregnancy and is associated with significant maternal morbidity and perinatal morbidity and mortality.

Bile acids are a sensitive but not specific marker for OC and may be raised before elevation of other liver function markers. The diagnosis is one of exclusion, as other causes of liver dysfunction, either specific to pregnancy or not, need to be also considered.

Whilst bile acids may be raised in other hepatobiliary disease the clinical usefulness of this test over existing liver function tests has not been proven and it is therefore not recommended for use outside the investigation of suspected OC in pregnant women.

General information

Collection container:

4.9 mL SST (Sarstedt brown top)

External users: send separated serum

Type and volume of sample:

Serum, minimum 1.0 mL

Specimen transport/special precautions

Internal: No special precautions

External: Separate and aliquot into a secondary tube

Laboratory information

Method principle:

Colorimetric assay

Biological reference range or cut off:

The range quoted for non-fasted pregnant women is 0 - 14 $\mu\text{mol/L}$. Within this range a diagnosis of OC is excluded.

Division of Laboratory Medicine

Biochemistry

Turnaround times:

M-F: Daily

Weekend: Available by arrangement with laboratory

Clinical information

Clinical decision points:

Refer to reference range information above

References

- 1) [Royal College of Obstetricians and Gynaecologists \(RCOG\) guideline \(No.43\) on obstetric cholestasis \(revised January 2011\)](#)
- 2) Obstetric Cholestasis (OC) diagnosis and management guideline. [MAT 80] Version: 5.1, 2018. Trust guideline

(Last updated November 2019)