

# Echogenic bowel (isolated)

Document Author: Katie Donovan

Approved by: Antenatal Forum

Approval Date: December 2019

Review Date: December 2022

Amendment 15 June 2021 - 'All women where isolated echogenic bowel is identified at the fetal anomaly ultrasound scan should be offered referral to a local/tertiary fetal medicine unit at the point of identification, following the ultrasound scan examination'. Information received from ASW in June 2021.

# **Echogenic Bowel (Isolated)**

## **Background**

Echogenic bowel is where a part of the fetal bowel appears 'brighter than bone' on ultrasound scan. It is thought to be identified in approximately 0.4% (4 in 1000) of anomaly scans performed in Wales (Antenatal Screening Wales, 2018).

## **Aetiology**

The exact cause is unknown however it is thought that the most common cause is bloodstained fluid in the fetal bowel; the baby normally swallows amniotic fluid and if it contains blood this will appear brighter on ultrasound (ASW, 2018). Echogenic bowel has also been linked with cystic fibrosis, viral infections and chromosomal abnormalities.

## **Associated conditions**

When isolated echogenic bowel has been identified at the anomaly ultrasound scan approximately 70% of babies are born without any problems however, the following problems have been identified in some cases of babies with echogenic bowel.

*IUGR – 9%*

*Prematurity – 12%*

*Increased risk of stillbirth – 3%*

*Cystic Fibrosis – 2%*

*Cytomegalovirus (CMV) – 2%*

## **Investigations**

Both maternal and paternal testing for cystic fibrosis (CF) should be offered as this can be indicated in instances of echogenic bowel. CF testing is done via the genetics laboratory in Cardiff and a genetics request card needs to be completed by the antenatal clinic midwife/obstetrician when echogenic bowel is identified.

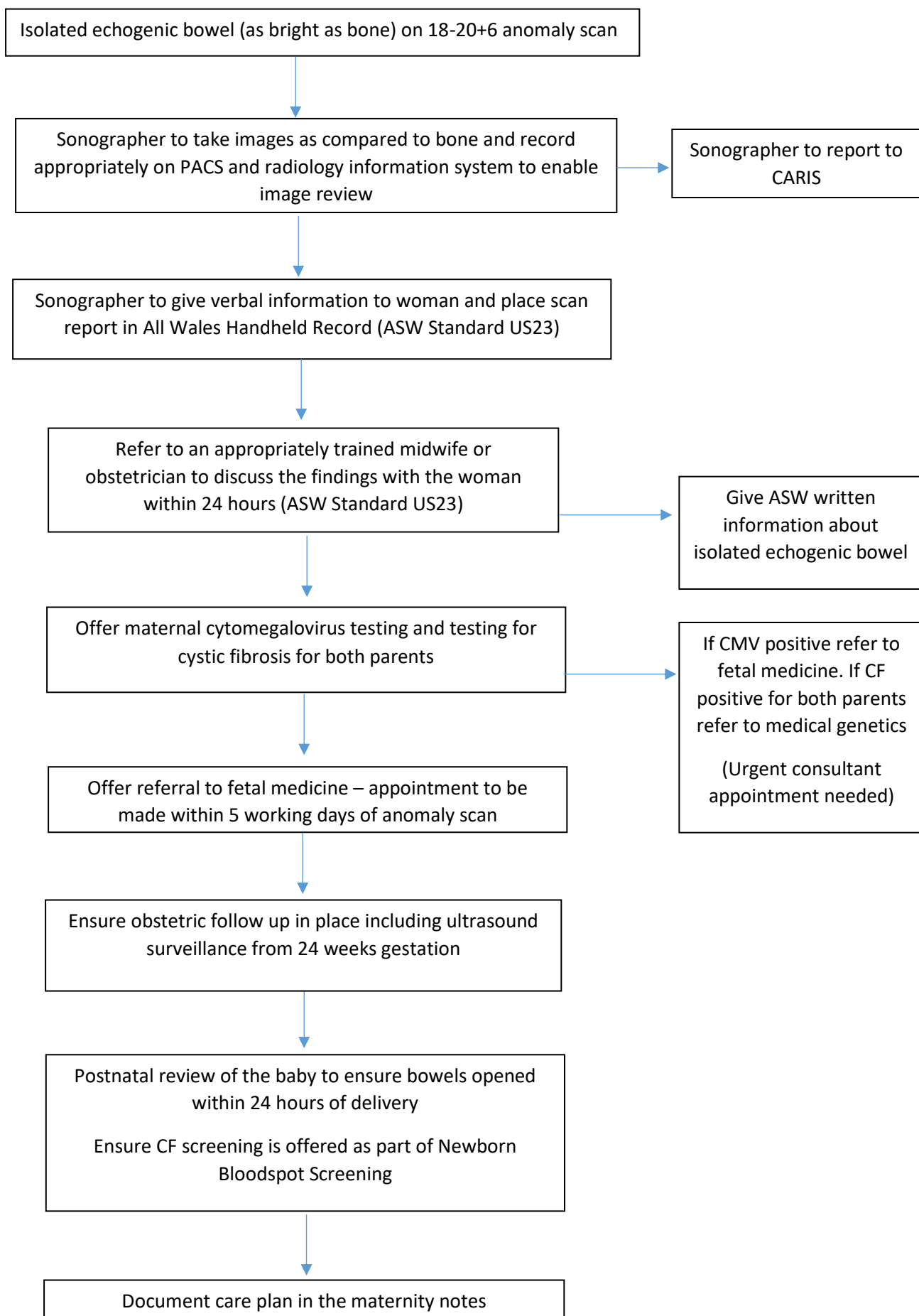
Alongside CF testing, maternal testing for CMV testing is also advised, this is to rule out maternal infection which can be transmitted to the fetus resulting in congenital cytomegalovirus.

It is useful to note that chromosomal abnormalities can be linked to echogenic bowel however there is not enough evidence to routinely karyotype for echogenic bowel. Amniocentesis should however be considered if any of the preliminary tests are positive.

## **Pathway**

The following pathway has been developed by Antenatal Screening Wales (2018) for cases of isolated echogenic bowel only. For cases where there are other factors – please discuss with an obstetrician.

## ANTENATAL SCREENING WALES CARE PATHWAY



## **Information**

Antenatal Screening Wales have produced an Information for Women leaflet which can be access here and can be given to women when discussing the findings of the scan. Double click the images below to open the full document.



Adobe Acrobat  
Document

*Echogenic Bowel Welsh*



Info for women  
echogenic bowel Engl

*Echogenic Bowel - English*

## Maternity Services

### Checklist for Clinical Guidelines being Submitted for Approval

Title of Guideline:	Echogenic bowel (isolated)
Name(s) of Author:	Katie Donovan
Chair of Group or Committee approving submission:	Antenatal Forum
Brief outline giving reasons for document being submitted for ratification	Update of 2011 guideline
Details of persons included in consultation process:	Katie Donovan Antenatal forum
Name of Pharmacist (mandatory if drugs involved):	
Issue / Version No:	2
Please list any policies/guidelines this document will supercede:	Echogenic bowel 2011
Date approved by Group:	December 2019
Next Review / Guideline Expiry:	December 2022
Please indicate key words you wish to be linked to document	Echogenic Bowel CMV Cystic Fibrosis Ultrasound
File Name: Used to locate where file is stores on hard drive	Echogenic, bowel, fetal