Royal Cornwall Hospitals
NHS Trust

Amniotic Fluid Volume Abnormality: Diagnosis and Management Clinical Guideline

V4.1

March 2026

1. Aim/Purpose of this Guideline

1.1. To identify and optimally manage pregnancies affected by abnormalities of amniotic fluid (AF) volume.

1.2. This guideline makes recommendations for women and people who are pregnant. For simplicity of language the guideline uses the term women throughout, but this should be taken to also include people who do not identify as women, but who are pregnant, in labour and in the postnatal period. When discussing with a person who does not identify as a woman, please ask them their preferred pronouns and then ensure this is clearly documented in their notes to inform all health care professionals.

1.3. This version supersedes any previous versions of this document.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

2. The Guidance

Abnormalities of AF volume are associated with adverse maternal and fetal outcome. Detection by ultrasound and appropriate management is an important part of pregnancy care.

2.1. Referral for AF Assessment

Referral to the scan department specifically for AF quantification should only be made if there is clinical suspicion of polyhydramnios. Rupture of the membranes is a clinical rather than scan diagnosis. Once abnormality of AF volume is identified on scan, the necessity and timing of on-going scans will be individualised by a senior Obstetrician or Fetal Medicine Specialist (see below).

2.2. Measurement of amniotic fluid by ultrasound

2.2.1. **AF volume should be assessed at all pregnancy scans.**

2.2.2. **Subjective assessment:** Prior to the 18-20 week anomaly scan, amniotic fluid should be assessed subjectively.

2.2.3. **Single Deepest Pool (SDP):** In the second half of pregnancy, routine assessment of AF volume should be by measuring the SDP. The transducer is kept parallel to the patient's longitudinal axis and perpendicular to the floor. The deepest vertical pocket of fluid is measured in centimetres without an aggregate of cord or fetal small parts. To be a measurable pocket, the pocket must be at least 1 cm in the horizontal measurement throughout the pocket.

2.2.4. **Amniotic Fluid Index (AFI)**: The Amniotic Fluid Index (AFI) should not be used as the primary screen because it increases the number of cases of oligohydramnios detected and increases intervention without improving outcomes. The AFI should only be measured if abnormal AF volume is identified by the SDP. The AFI in cm is calculated by summation of the SDP measured in each of four uterine quadrants.

2.3. Definitions of Abnormal Amniotic Fluid Volume

AF volume is considered normal if the SDP is between 2 cm and 8 cm. Do not use the Viewpoint database gestational age dependent charts. If SDP is <2 cm or >8 cm, the AFI should then be measured to clarify the diagnosis. The following thresholds should be used:

- **Polyhydramnios: SDP >8 cm and AFI >25 cm**
  - **Mild:** AFI 25-30 cm (if <25 cm, do not diagnose polyhydramnios).
  - **Moderate / Severe:** AFI >30 cm.
- **Oligohydramnios: SDP <2 cm and AFI <5 cm** (if AFI is >5 cm, do not diagnose oligohydramnios).

2.4. Management of Polyhydramnios

- Do not perform infection screens unless indicated by history or by identification of ultrasound markers of infection other than polyhydramnios.
- Ensure all women are aware of the increased risk of pregnancy complications (such as pre-term labour, preterm rupture of membranes, emergency Caesarean section, postpartum haemorrhage and neonatal concerns). Explain that their pregnancy is therefore classed as high risk (New 2026).

2.4.1 Mild polyhydramnios

2.4.4.1. Midwife / sonographer to arrange for a Glucose Tolerance Test (GTT) and arrange repeat scans 4 weekly in the Main Ultrasound Department.

2.4.4.2. If GTT is abnormal, refer to the Diabetes Specialist Midwife.

2.4.4.3. The sonographer should stop scan surveillance if mild polyhydramnios resolves.

2.4.4.4. If polyhydramnios progresses to moderate / severe, the sonographer should refer for next available FMU appointment.

2.4.4.5. If mild polyhydramnios persists, the midwife should refer to the Obstetric Clinic after 34 weeks.

2.4.4.6. The Obstetric team should individualise care: there is no evidence of benefit of induction of labour in these cases (New 2026).

2.4.4.7. Delivery on delivery suite with CTG should be recommended (New 2025).

2.4.2 **Moderate / severe polyhydramnios**

2.4.4.1. The sonographer should arrange for a GTT and refer for next available FMU appointment for detailed ultrasound assessment, if delivery is not already imminently planned (New 2026).

2.4.4.2. If an abnormality is detected, FMU will plan on-going care in accordance with the anomaly found (New 2025).

2.4.4.3. If no abnormality is detected and the polyhydramnios is thought to be idiopathic, FMU will individualise follow up.

2.4.4.4. FMU will discuss mode and timing of delivery. There are no quality data to guide management of idiopathic polyhydramnios and care should be individualised. Factors to consider include severity of the polyhydramnios, maternal symptoms, fetal size, lie and stability and previous obstetric history.

2.4.4.5. FMU will liase with the neonatal team regarding possible neonatal management implications, such as passing an nasogastric tube prior to feeding (New 2025).

2.5. Management of Oligohydramnios

2.5.1 The sonographer should refer to triage for same day clinical review and to rule out preterm prelabour rupture of the membranes (PPROM).

2.5.2 If triage confirms PPROM, see Preterm Prelabour Rupture of Membranes (PPROM) Diagnosis and Management Clinical Guideline.

2.5.3 If no evidence of PPROM, triage should refer cases <36 weeks to fetal medicine (rcht-tr.screening@nhs.net) for assessment. If 36 weeks or more, personalise management and involve senior obstetrician.

2.5.4 If there is suspicion of fetal growth restriction, manage as per Fetal Growth Restriction (FGR): Risk Assessment, Prevention, Surveillance and Management of Pregnancies at Risk of FGR Clinical Guideline (New 2025).

2.5.5 On-going management will depend upon identification of any underlying pathology and should be individualised by the FMU.

2.5.6 Data are inadequate to guide management of idiopathic oligohydramnios at term but some data suggests an increase in adverse outcome. Delivery at 39 weeks should be discussed.

2.5.7 Labour and delivery should take place on Delivery Suite. Continuous fetal monitoring should be used with any uterine activity associated with induction of labour and throughout labour.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Amniotic Fluid Abnormality: Diagnosis and Management.
Lead	Audit Midwives.
Tool	• Has Amniotic Fluid (AF) volume been assessed at all pregnancy scans from 18 weeks? • Has mild polyhydramnios been managed in accordance with the guideline? • Has moderate/sever e polyhydramnios ben managed in accordance with the guideline? • Has Oligohydramnios been managed in accordance with the guideline?
Frequency	Once in lifetime of the guideline or sooner if indicated.
Reporting arrangements	• A formal report of the results will be received at the Audit review team (ART) meeting. • During the process of the audit, if compliance is below 75% or other deficiencies identified, this will be highlighted at the next maternity forum and an action plan agreed.
Acting on recommendations and Lead(s)	• Any deficiencies identified on the annual report will be discussed at ART and an action plan developed. • Action leads will be identified and a time frame for the action to be completed by. • The action plan will be monitored by ART until all actions complete.
Change in practice and lessons to be shared	• Required changes to practice will be identified and actioned within a time frame agreed on the action plan • A lead member will be identified to take each change forward where appropriate. • The results of the audits will be distributed to all staff through the Patient Safety newsletter/ART as per the action plan.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the Equality Diversity And Inclusion Policy or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Amniotic Fluid Volume Abnormality Diagnosis and Management Clinical Guideline V4.1
This document replaces (exact title of previous version):	Amniotic Fluid Volume Abnormality Diagnosis and Management Clinical Guideline V4.0
Date Issued/Approved:	March 2026
Date Valid From:	March 2026
Date Valid To:	October 2028
Directorate/Department responsible (author/owner):	Rob Harper, Consultant Obstetrician.
Contact details:	01872 252730.
Brief summary of contents:	To identify and optimally manage pregnancies affected by abnormalities of amniotic fluid (AF) volume.
Suggested Keywords:	Amniotic fluid.
Target Audience:	**RCHT:** Yes **CFT:** No **CIOS ICB:** No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Maternity Guidelines Group
Manager confirming approval processes:	Caroline Chappell
Name of Governance Lead confirming consultation and ratification:	Michael Cross
Links to key external standards:	None
Related Documents:	Rutherford SE, Phelan JP, Smith CV, Jacobs N. The four quadrant assessment of amniotic fluid volume: an adjunct to antepartum fetal heart rate testing. Obstet Gynecol. 1987;70:353-6.
Training Need Identified?	No

Information Category	Detailed Information
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical/Midwifery and Obstetrics

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
August 2016	V1.0	Initial issue.	Rob Holmes, Consultant Obstetrician.
July 2019	V2.0	Full review with minor changes made.	Rob Holmes, Consultant Obstetrician.
July 2022	V3.0	Full review with minor changes made.	Rob Holmes, Consultant Obstetrician.
October 2025	V4.0	Full review with minor changes made.	Rob Harper, Consultant Obstetrician.
March 2026	V4.1	Small updates related to polyhydramnios noted by New 2026	Rob Harper, Consultant Obstetrician.

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus six years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Quality and Equality Impact Assessment (QEIA) Guidance Form

The QEIA process allows RCHT to monitor the impact of changes to its policies and services, ensuring that nobody is unduly disadvantaged.

For guidance, please contact the Equality, Diversity and Inclusion Team at rcht.inclusion@nhs.net

1. About the Policy / Service Change:

Information Category	Detailed Information
Individual completing QEIA: (Name, Role, Email)	Rob Harper, Consultant Obstetrician 01872 252730
Service Area: (Department, Care Group)	Obstetrics and Gynaecology.
Name of document:	Amniotic Fluid Volume Abnormality Diagnosis and Management Clinical Guideline V4.1
Type of document: (Policy, Strategy, Service Change)	Clinical guideline
Policy / Service Change Objective(s): (What should it achieve, and for whom?)	To identify and optimally manage pregnancies affected by abnormalities of amniotic fluid (AF) volume.
Does this Policy / Service Change: (Select all that apply)	Eliminate Discrimination? Yes Advance Equal Opportunity? Yes Foster Good Relations? Yes
Which Groups are impacted by this policy? (Select all that apply)	Yes – Workforce. Yes – Patients. No – Visitors. No - System Partners. No - External Organisations. No – Contractors.

2. About the impact:

For each characteristic, please indicate whether you think the impact will be positive, negative or unknown, and provide a brief explanation:

Note: Stating 'This document has no impact on this group' for all characteristics will result in the document not being approved.

Characteristic	Impact	Explanation
Age	Positive	
Sex	Positive	
Gender Reassignment	Positive	
Race, Ethnicity, Culture	Positive	
Disability or Long-term Health Condition	Positive	
Religion or Belief	Positive	
Marriage and Civil Partnership	Positive	
Pregnancy and Maternity	Positive	
Sexual Orientation	Positive	
Armed Forces Community	Positive	
Low Income Households	Positive	

A consultation must take place with appropriate groups to clarify unknown impacts and recommend mitigation of negative impacts.

3. About the Consultation

Information Category	Detailed Information
Which bodies have been consulted? (Not all will be required)	Yes Service Employees. No Employee Network Groups. No Union Representatives. No EDI Team. No Patient / Service Users. No Patient Advisory Group. Yes Patient Representatives. No Local / National Charities. No System Partners. No External Organisations. No Other.

Information Category	Detailed Information
Please list the individuals / groups who have been consulted: (Role, Organisation, Email. Avoid using individual names)	Maternity Guidelines Group
Consultation Outcomes: (Positive feedback, new negative impacts, recommendations)	Guideline agreed
What action will you now take?	Continue without Amendments
Provide Details:	Agreed
Do any negative impacts remain?	No
Explain rationale for proceeding with negative impacts:	None

I am confident that this QEIA is an honest reflection of my efforts to comply with the Public Sector Equality Duty, and that all appropriate, necessary actions have been taken to mitigate any negative impacts as far as practicable.

Name:	Rob Harper	Role:	Consultant Obstetrician