Guideline for the management of polyhydramnios

Author/Owner	**Obstetric Consultants and Practice Educator Midwife**	
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1.0 Introduction

Polyhydramnios is defined as an excessive amount of amniotic fluid and occurs in 0.2 – 2% of all pregnancies. Polyhydramnios may be suspected during abdominal palpation where the uterus either appears or measures large for dates and the volume of amniotic fluid appears increased in relation to fetal size.

Clinically the most effective method of diagnosing polyhydramnios; despite limitations is to measure the Amniotic Fluid Index (AFI) using ultrasound.

When using these measurements, a diagnosis of polyhydramnios can be made if the AFI ≥ 25 cm or the deepest pocket is ≥ 8cm. Polyhydramnios can be further categorised according to the AFI:

Categorisations of polyhydramnios (The Fetal medicine foundation)	
Mild polyhydramnios	AFI: 25-30 cm or vertical measurement of deepest pocket 8-11cm
Moderate polyhydramnios	AFI: 30.1 to 35 cm or vertical measurement of deepest pocket 12-15cm
Severe polyhydramnios	AFI > 35 cm or vertical measurement of deepest pocket ≥ 16cm

2.0 Objective

To ensure the correct management of polyhydramnios and possible underlying causes in the antenatal period.

3.0 Scope

All medical, nursing and midwifery staff have a responsibility to work within this guideline and attend training to ensure their competence is maintained.

Any deviations from the guideline, by a senior clinician, to meet the individual patient's need must be documented within the clinical record.

4.0 Main body of the document

4.1 Initial assessment

Polyhydramnios may be suspected following abdominal palpation, after plotting an increased fundal height measurement on a customised Gestation Related Optimal Weight (GROW) chart or as an incidental finding on ultrasound scan.

The woman will be referred to Antenatal Day Unit (ANDU) for review and ultrasound scan.

4.2 Diagnosis

Following diagnosis of polyhydramnios, the following investigations will be required to determine any underlying cause.

Investigations required:
Glucose Tolerance Test (GTT) if not already performed. There is no evidence to suggest a repeat GTT is necessary if a woman has had a normal result this pregnancy
Toxoplasma, Rubella, Cytomegalovirus, Herpes (TORCH) screen Parvovirus- B19
Review of maternal blood group and antibody status
Amniocentesis will be offered to the woman if relevant fetal abnormalities are suspected on ultrasound scan

4.3 Management

If the fetus is small for gestational age perform a detailed ultrasound scan to rule out fetal abnormality and follow small for gestational age guideline.

Following a risk assessment, management will consist of:

- Explain the diagnosis to the woman including the risks of polyhydramnios (see section 4.5). If abnormality is suspected, refer to the Antenatal Screening coordinator and the Fetal clinic
- Transfer to consultant led care (if not already) and advise to deliver in an obstetric led unit
- Management of co-morbidities such as diabetes and infection
- The initiation and frequency of the following will be assessed on an individual basis and instigated according to need:
    - Frequency of antenatal appointments to assess fetal wellbeing and where applicable fetal presentation
    - Ultrasound scans for fetal growth and liquor volume
- Delivery will be arranged in accordance with individual risk assessment. Consider induction of labour at 38-39 weeks

4.4 Predisposing conditions

In the majority of cases the cause is idiopathic but certain conditions have an association with polyhydramnios. The following lists of conditions are not exhaustive.

Conditions that have an association with polyhydramnios (The American institute of Ultrasound Medicine 2013)**:**	
Fetal conditions:	**Maternal conditions:**
• Anomalies of the gastrointestinal tract leading to decreased elimination of amniotic fluid • Abnormalities in fetal urine production • Exposed fetal and spinal tissues • Isoimmunisation, fetal anaemia and hydrops • Infection (including viral infections) • Multiple pregnancy with twin to twin transfusion • Chromosomal abnormalities • Fetal hyperdynamic circulation • Fetal tumours • Neuromuscular abnormalities	• Maternal diabetes • Placental tumours • Maternal substance misuse • Smoking • Drugs such as lithium

4.5 Complications of polyhydramnios

Pregnancies complicated by polyhydramnios are at an increased risk of adverse outcomes including perinatal mortality.

Complications of polyhydramnios (The American institute of Ultrasound Medicine 2013)**:**	
• Pregnancy induced hypertension • Maternal urinary tract infection • Premature delivery • Postpartum haemorrhage - due to overdistension of the uterus • Premature rupture of the membranes • Cord prolapse	• Abnormal fetal presentation • Low Apgar scores • Intra-uterine death • Neonatal death • Placental abruption • Caesarean section

Please note:

- Polyhydramnios can resolve spontaneously during pregnancy

5.0 Roles and responsibilities

5.1 Midwives

To provide the best evidence-based care for women in accordance with appropriate guidance from confirmation of pregnancy and throughout the intrapartum period.

5.2 Obstetricians

To provide care for women in accordance with appropriate guidance from diagnosis to delivery.

5.3 Paediatricians

To attend delivery when their presence is requested.

5.4 Anaesthetists

To attend delivery when their presence is requested and provide anaesthesia to the woman for operations and procedures as appropriate.

6.0 Associated documents and references

Perinatal institute. Fetal Growth Assessment and Implementation of Customised Growth Charts [online] www.perinatal.nhs.uk

Sandlin AT, Chuahan SP and Magann EF. The American institute of Ultrasound Medicine. Clinical Relevance of Sonographically Estimated Amniotic Fluid Volume: Polyhydramnios. J Ultrasound Med (2013) [online] https://onlinelibrary.wiley.com/doi/full/10.7863/jum.2013.32.5.851#references-section

NICE Antenatal care for uncomplicated pregnancies
Clinical guideline [CG62] Published date: 26 March 2008 Last updated: 04 February 2019 Accessed 21/08/20 https://www.nice.org.uk/guidance/cg62/resources/antenatal-care-for-uncomplicated-pregnancies-pdf-975564597445

S. Pri-paz et al. Maximal amniotic fluid index as a prognostic factor in pregnancies complicated by polyhydramnios. (2011) Accessed 21/08/20 https://obgyn.onlinelibrary.wiley.com/doi/full/10.1002/uog.10093

The fetal medicine Foundation. Fetal abnormalities, amniotic fluid, polyhydramnios. https://fetalmedicine.org/education/fetal-abnormalities/amniotic-fluid/polyhydramnios

7.0 Training and resources

Training will be facilitated as documented in the Maternity Training Needs Analysis. This is updated on an annual basis.

8.0 Monitoring and audit

Any adverse incidents relating to the management of polyhydramnios will be monitored via the incident reporting system. Any problems will be actioned via the case review and root cause analysis action plans. The action plans are monitored by the governance midwife to ensure that improvements in care are made. The trends and any root cause analysis are discussed at the monthly risk meetings to ensure that appropriate action has been taken to maintain safety.

The guideline for the management of polyhydramnios will be audited in line with the annual audit programme, as agreed by the CBU. The audit action plan will be reviewed at the monthly risk management meetings on a quarterly basis and monitored by the risk midwife to ensure that improvements in care are made.

9.0 Equality and Diversity

This section is mandatory for all Trust Approved Documents and must include the statement below:

The Trust is committed to an environment that promotes equality and embraces diversity in its performance as an employer and service provider. It will adhere to legal and performance requirements and will mainstream equality, diversity and inclusion principles through its policies, procedures and processes. This guideline should be implemented with due regard to this commitment.

To ensure that the implementation of this guideline does not have an adverse impact in response to the requirements of the Equality Act 2010 this policy has been screened for relevance during the policy development process and a full equality impact assessment is conducted where necessary prior to consultation. The Trust will take remedial action when necessary to address any unexpected or unwarranted disparities and monitor practice to ensure that this policy is fairly implemented.

This guideline can be made available in alternative formats on request including large print, Braille, moon, audio, and different languages. To arrange this please refer to the Trust translation and interpretation policy in the first instance.

The Trust will endeavor to make reasonable adjustments to accommodate any employee/patient with particular equality, diversity and inclusion requirements in implementing this guideline. This may include accessibility of meeting/appointment venues, providing translation, arranging an interpreter to attend appointments/meetings, extending policy timeframes to enable translation to be undertaken, or assistance with formulating any written statements.

9.1 Recording and Monitoring of Equality & Diversity

This section is mandatory for all Trust Approved Documents and must include the statement below:

The Trust understands the business case for equality, diversity and inclusion and will make sure that this is translated into practice. Accordingly, all guidelines will be monitored to ensure their effectiveness.

Monitoring information will be collated, analysed and published on an annual basis as part of Equality Delivery System. The monitoring will cover the nine protected characteristics and will meet statutory employment duties under the Equality Act 2010. Where adverse impact is identified through the monitoring process the Trust will investigate and take corrective action to mitigate and prevent any negative impact.

Appendix 1
Equality Impact Assessment – required for policy only

Appendix 2
Glossary of terms

AFI – Amniotic fluid index

CTG – Cardiotocograph

GTT – Glucose tolerance test

IUGR – Intra-uterine growth restriction

SDP – Single deepest pocket

SGA – Small for gestational age

TORCH – Screening for toxoplasmosis, rubella, cytomegalovirus and herpes

Appendix 3
Maintain a record of the document history, reviews and key changes made (including versions and dates)

Version	Date	Comments	Author
2	03.09.20	Minor changes to be made then for approval and to be sent to Women's Business and Governance Meeting	C Cole

Review Process Prior to Ratification:

Name of Group/Department/Committee	Date
Reviewed by Maternity Guideline Group	03/09/2020
Reviewed at Women's Business and Governance meeting	13/11/2020
Approved by CBU 3 Overarching Governance Meeting	26/05/2021
Approved at Medicines Management Committee (if document relates to medicines)	N/A

Trust Approved Documents (policies, clinical guidelines and procedures)

Approval Form

Please complete the following information and attach to your document when submitting a policy, clinical guideline or procedure for approval.

Document type (policy, clinical guideline or procedure)	Guideline
Document title	Polyhydramnios
Document author (Job title and team)	**Obstetric Consultants and Practice Educator Midwife**
New or reviewed document	Reviewed
List staff groups/departments consulted with during document development	**Consultant obstetricians, lead midwives, senior midwives**
Approval recommended by (meeting and dates):	Reviewed by Maternity Guideline Group 03/09/2020 Reviewed at Women's Business and Governance meeting 13/11/2020 Approved by CBU 3 Overarching Governance Meeting 26/05/2021
Date of next review (maximum 3 years)	26/05/2024
Key words for search criteria on intranet (max 10 words)	Polyhydramnios
Key messages for staff (consider changes from previous versions and any impact on patient safety)	
I confirm that this is the FINAL version of this document	**Name: Charlotte Cole** **Designation: Practice Educator Midwife**

FOR COMPLETION BY THE CLINICAL GOVERNANCE TEAM

Approved by (group/committee): CBU3 Governance
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