GUIDELINES DOCUMENT CONTROL SHEET

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Ratification

Signature of Chairman of Ratifying Body	
Name / Job Title of Chairman of Ratifying Body:	Prof Chris Grey, QHGC
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SignedCopy Held at:	Corporate Records Office, DMH

VERSION CONTROL TABLE

Date of Issue	Version Number	Status
14/05/13	1.0	superseded
19/7/2016	2.0	Approved

TABLE OF REVISIONS

Date	Section	Revision	Author
24/04/13	Full	Guideline developed for use of Oxytocin – taken from care in Labour to make process clearer when delay in labour diagnosed	A Bosomworth Evidence Based Practice Group
25.6.16	Full	Reviewed as out of date – no changes to practice	T Saukila Evidence Based Practice Group

CONTENTS

1 INTRODUCTION

Where delay has been diagnosed in labour oxytocin can be used to augment the labour. The woman should be informed that oxytocin should bring forward time of birth but not influence mode of birth. Oxytocin will increase frequency and strength of contractions and continuous Electronic fetal monitoring will be necessary.

2 PURPOSE

This guideline has been developed as a guide when delay has been diagnosed at various stages of labour.

3 SCOPE

This guideline applies to all health professionals involved in the care of women in labour where there may be a delay at any stage in their labour. All staff working within the directorate are responsible for ensuring that they familiarise themselves with the content of this guideline.

4 DUTIES

This guideline defines the responsibilities of midwives and obstetricians involved in the care of women in labour when a delay has been identified.

5 MANAGEMENT

5.1 Oxytocin in use for augmentation

- Oxytocin must only be used in the presence of ruptured membranes. This may have occurred either spontaneously or by amniotomy.
- Combined early amniotomy with the use of oxytocin should not be used routinely.
- Oxytocin infusion must occur in the labour ward where fetal monitoring and uterine contractions must be continuously monitored.
- The obstetric team must prescribe oxytocin prior to use on the medication administration chart.
- An infusion pump with a non-returnable valve must deliver the oxytocin infusion.
- All care provided to be documented in Intrapartum pathway.

The Middle Grade Obstetrician/Consultant must document an individual management plan in the intrapartum pathway when oxytocin is being commenced.

5.2 Monitoring when using oxytocin

A. Monitoring for the mother

Refer to the CDDFT Guideline on the Care of Women in Normal Labour GUID/MAT/1400 for maternal observations. This will include hourly pulse and 4 hourly temperature and blood pressure. (These observations may need to be repeated more frequently if there is any concern regarding the observations recorded or any pre-existing condition, or risk factors which requires the temperature or blood pressure to be recorded more frequently).

B. Monitoring for the fetus

- Continuous electronic fetal monitoring must be undertaken when oxytocin is in use. Refer to the CDDFT Intrapartum Fetal Surveillance Guideline GUID/MAT/14/06.
- Document on the cardiotocograph (CTG) trace, the Intrapartum pathway and record on the Partogram when intravenous oxytocin is commenced.
- Document on the CTG trace, the Intrapartum pathway and Partogram when the intravenous oxytocin rate is increased or decreased.

5.3 Use of Oxytocin in the first stage of labour

C. Delay in the first stage of labour – see flow chart

- If delay in the established first stage of labour is suspected, amniotomy should be considered for all women with intact membranes. There must be an explanation of the procedure and advice that it will shorten her labour and may increase the strength and pain of her contractions.
- Whether or not a woman has agreed to an amniotomy, women with suspected delay in the established first stage of labour should be advised to have a vaginal examination 2 hours later, and if progress is less than 1 cm a diagnosis of delay is made.
- If oxytocin is used in the first stage of labour women should be advised to have a vaginal examination 4 hours after commencing oxytocin.

D. Assessment prior to the commencement of Oxytocin in the first stage of labour

- When delay in the first stage of labour in nulliparous women occurs, advice should be sought from medical staff regarding the use of oxytocin.
- When delay in the first stage of labour in multiparous women occurs the woman should be reviewed by a middle grade obstetrician/consultant.

- The assessment prior to commencement of oxytocin should consider:
  - Parity
  - Cervical dilation and rate of change*
  - Uterine contractions
  - Station and position of presenting part*
  - Fetal wellbeing

- There must be an individual management plan recorded in Intrapartum Pathway by the doctor making the decision.

* if a vaginal examination has been performed by a midwife this does not need repeating by a doctor unless there is a concern regarding findings.

E. Dose schedule and frequency of increment of Oxytocin in the first stage of labour – Appendix A (First stage of Labour)

- The aim of oxytocin use in the first stage of labour is to achieve 4-5 effective contractions every ten minutes.
- Oxytocin intravenous infusion - dilute 10 units in 500mls of Sodium Chloride 0.9%
- Start at 3mls an hour (1 milliunits per minute)
- Increase every 30 minutes as per appendix 1 up to a maximum of 60mls an hour (20 milliunits per minute) aiming for a maximum of 4-5 contractions every 10 minutes.

The delivery of oxytocin will be recorded as mls per hr as per the infusion pump.

- The middle grade obstetrician/consultant must review and prescribe any further increments of oxytocin above 60mls an hour.
- Oxytocin may be increased to a maximum of 96mls per hour (32 milliunits per minute) depending on the contraction rate only on the written direction of a senior obstetrician as this is an unlicenced dose but is a recognized dose in use
- If regular effective contractions are not established after a total of 5 hours the appropriate middle grade obstetrician/consultant opinion must be sought.
- The oxytocin infusion must not be increased in the case of a suspicious or pathological fetal heart trace until a middle grade obstetrician/consultant has reviewed the case.

F. When Oxytocin should be stopped in the first stage labour

- If there is less than 2cms progress after 4hrs of oxytocin and onset of regular contractions, further middle grade obstetrician/consultant is required to consider caesarean section. If there is 2 cms or more, the women's progress should be monitored 4 hourly (See the CDDFT Care in Normal Labour GUID/MAT/1400).
- In the case of uterine hyperstimulation, (see section 4.5).
- If the fetal heart trace is classified as pathological, oxytocin should be stopped and a full assessment of the fetal condition undertaken by a middle grade obstetrician/consultant before oxytocin is recommenced. This must be documented in the intrapartum pathway.
- A request to stop the oxytocin from the mother/partner should be discussed with the middle grade obstetrician/consultant with an appropriate management plan formulated. This discussion must be documented in the intrapartum pathway.
- When oxytocin is stopped this should be clearly documented in the Intrapartum pathway.
- If oxytocin is to be recommenced, this should be done by starting at half the rate it was at when suspended once the fetal heart has been seen to be normal for 30 min.

5.4 Use of Oxytocin in the second stage labour

G. Delay in the second stage of labour – see flow chart

- In a nulliparous woman birth would be expected to take place within 3 hours of the start of active second stage of labour.
- In nulliparous women diagnosis of delay in the active second stage of labour should be made when it has lasted 2 hours.
- In nulliparous women, if after 1 hour of active second stage progress is inadequate, delay is suspected. Following vaginal examination, amniotomy should be offered if the membranes are intact.
- For parous women birth would be expected to take place within 2 hours of the start of the active second stage of labour for most women.
- For parous women diagnosis of delay in the active second stage of labour should be made when it has lasted for 1 hour.

H. Assessment prior to commencement of Oxytocin in the second stage of labour

- All women with confirmed delay in the second stage of labour should be assessed by a middle grade obstetrician/consultant with an individual management plan recorded in the labour records.
- The assessment for oxytocin use in the second stage of labour should include:
  - Parity
  - Uterine contractions
  - Station and position of presenting part
  - Fetal Wellbeing
- For women where there is a delay in the second stage of labour, consideration should be given to the use of oxytocin, with the offer of regional analgesia, if contractions are inadequate at the onset of the second stage.
- Oxytocin should not be used routinely for parous women.
- There must be an individual management plan recorded in the intrapartum care pathway by the doctor making the decision.

I. Dose schedule and frequency of increment of Oxytocin in the second stage of labour – Appendix A (Second stage of Labour)

- The aim of oxytocin use in the second stage of labour is to ensure effective contractions to expedite delivery, ideally 4-5 contractions every ten minutes.
- If augmentation of labour is required in the second stage of labour this should be commenced promptly.

Oxytocin intravenous infusion - dilute 10 units in 500mls of Sodium Chloride 0.9%

1. Start at 12mls an hour (4 milliunits per minute)
2. Increase every 15 minutes upto 48mls an hour (16 milliunits per minute). This is recognised use of oxytocin
3. Remain at 48mls an hour (16 milliunits per minute) for 15 minutes.
4. After 15 minutes titrate to a maximum of 60mls an hour (20 milliunits per minute) according to uterine response

The delivery of oxytocin will be recorded as mls per hr as per the infusion pump.

- Continuous monitoring of uterine contractions and fetal heart rate must be performed.
- A middle grade obstetrician/consultant must be informed if spontaneous vaginal delivery is not imminent following 2 hours of active pushing for nulliparous women and 1 hour for a parous woman.
- The oxytocin infusion must not be increased in the case of a suspicious or pathological fetal heart trace until a middle grade obstetrician/consultant has reviewed the care.
- Following initial middle grade obstetrician/consultant assessment for women with delay in the second stage of labour, ongoing middle grade obstetrician/consultant review should be maintained.

J. When Oxytocin should be stopped in the second stage of labour

- In the case of uterine hyperstimulation, (see section 4.5)
- If the fetal heart trace is classified as pathological, oxytocin should be stopped and a full assessment of the fetal condition undertaken by a middle grade obstetrician/consultant before oxytocin is recommenced. This must be documented in the intrapartum pathway.
- If there is a delay in the second stage of labour middle grade obstetrician/consultant review should be sought. It may be appropriate to stop oxytocin.
- A request to stop the oxytocin from the mother/partner should be discussed with the middle grade obstetrician/consultant with an appropriate management plan formulated. This discussion must be documented in the intrapartum pathway when decision for caesarean is made.
- When oxytocin is stopped this should be clearly documented in intrapartum pathway.

5.5 Uterine Hyperstimulation

For the purpose of this guideline uterine hyperstimulation refers to:

- >5 contractions per 10 minutes for at least 20 minutes without any fetal heart rate changes.
- Uterine hypertonus whereby a contraction lasts at least 2 minutes without a change to the fetal heart.
- Uterine hyperstimulation which affects the fetal heart rate by persistent tachycardia, persistent decelerations or decreased short-term variability.
- Turn the oxytocin infusion off or reduce the drip rate depending on the severity of uterine stimulation.
- In the presence of uterine hyperstimulation and abnormal fetal heart give a single dose of terbutaline 250 micrograms subcutaneous injection. This must be prescribed by the speciality obstetrician/consultant.
- Evidence of fetal compromise may necessitate immediate delivery. Refer to the CDDFT Continuous Electronic Fetal Monitoring Guideline and Fetal Blood Sampling Guideline. Is this - CDDFT Intrapartum Fetal Surveillance Guideline GUID/MAT/14/06.

Flowchart for the use of Oxytocin to Augment Labour

- Oxytocin should only be used with ruptured membranes
- Continuous fetal monitoring / monitoring of contractions should be maintained
- Oxytocin should be medically prescribed and administered in an infusion pump with non-returnable valve
- Oxytocin infusion to achieve 4-5 contractions in 10 minutes
- Regime as per guideline

Delay in 1st stage of labour

Assess risk status –

- Parity
- Cervical dilatation and rate of change;
- Uterine contractions;
- Station and position of presenting part;
- Emotional state of the woman
- Fetal Wellbeing

Consider amniotomy.

After 2 hours, repeat vaginal examination.

Progress of less than 1cm dilatation – delay confirmed

Primigravida

Contact Middle Grade Obstetrician/Consultant for management plan and prescribing of Oxytocin to accelerate labour

Repeat vaginal examinations after 4 hours: less than 2cm progress, further review by Middle Grade Obstetrician/Consultant – consider C/S

Multigravida

Should be seen by Middle Grade Obstetrician/Consultant for abdominal palpation and vaginal examination prior to IV Oxytocin, as per guidelines

Delay in 2nd stage of labour

All women with a confirmed delay in 2nd stage of labour should be assessed by a senior obstetrician for a management plan. IV Oxytocin as per guidelines

Hyperstimulation

- 5 contractions per minute per 10 minutes for at least 20 minutes without FH rate changes;
- Uterine hypertonus – contractions last at least 2 minutes with FH changes;
- Uterine hyperstimulation which affects the FH rate.

Actions

- Turn IV Oxytocin infusion off or reduce rate;
- Consider Terbutaline 250micrograms subcutaneously
- If evidence of fetal compromise, consider immediate delivery

6 MONITORING

6.1 Key Performance Indicators

Performance will be measured on a regular basis as shown below.

6.2 Compliance and Effectiveness Monitoring

Monitoring Criterion	Response
Who will perform the monitoring?	Maternity Services
What are you monitoring?	• That assessment prior to Oxytocin has taken place • Individual Management plan has been documented • Continuous CTG has been used following commencement of oxytocin • Documentation of when Oxytocin has been stopped
When will the monitoring be performed?	Annually
How are you going to monitor?	Audit maternity notes using Maternity Audit Toolkit
What will happen if any shortfalls are identified?	Audit results shared with Clinical Governance Forum
Where will the results of the monitoring be reported?	Quarterly Clinical Audit Meeting
How will the resulting action plan be progressed and monitored?	Obs & Gynae Group – Quarterly Clinical Audit Meeting
How will learning take place?	Via Team meetings' newsletter, mandatory days

7 REFERENCES

1. National Institute for Health and Clinical Excellence (NICE). 2014. Intrapartum Care for Healthy Women and Babies.: NICE CG190. www.nice.org.uk

8 ASSOCIATED DOCUMENTATION

This policy should be read in conjunction with the following:

CDDFT Care of Women in Normal Labour GUID/MAT/1400
CDDFT Intrapartum Fetal Surveillance Guideline GUID/MAT/14/06.

9 APPENDICES

Appendix 1

Acceleration of Labour with Oxytocin (Syntocinon)
First Stage of Labour

Suggested Standardised Dilutions and Dose Regime for Acceleration of Labour in the 1st Stage

Time after starting (mins)	*Oxytocin Dose (mU/min)*	*Volume infused (mls/hour)*
		Dilution 10 units oxytocin in 500 mls Sodium Chloride 0.9%
0	1	3
30	2	6
60	4	12
90	8	24
120	12	36
150	16	48
180	20	60
210	24	72
240	28	84
270	32	96

- Doses from 24 mU/min to 32 mU/min are quantities that are not licensed and need to be specifically prescribed by the appropriate Obstetrician.

AIM FOR A MAXIMUM OF 4-5 CONTRACTIONS EVERY 10 MINUTES

Second Stage of Labour

Suggested Standardised Dilutions and Dose Regimens for Acceleration of Labour in the 2nd Stage

Time after starting (mins)	*Oxytocin Dose (mU/min)*	*Volume infused (mls/hour)*
		Dilution 10 units Oxytocin (Syntocinon) in 500 mls of normal saline
0	4	12
15	8	24
30	12	36
45	16	48
Oxytocin remains at 48/mls/hr for 15 mins. Thereafter titrate as required to maintain contractions at no more than 4-5 in 10 minutes as 1st Stage Protocol		

AIM FOR A MAXIMUM OF 4-5 CONTRACTIONS EVERY 10 MINUTES

Appendix 2

Equality Analysis / Impact Assessment

EAIA Assessment Form v3/2013

Division/Department:	Family Services – Maternity Services
Title of policy, procedure, decision, project, function or service:	Use of Oxytocin for delay in Labour
Lead person responsible:	Evidence Based Practice Group - Chair
People involved with completing this:	Joanne Woodward Evidence Based Practice Group

Type of policy, procedure, decision, project, function or service:

Existing	Yes
New/proposed	☐
Changed	☐

Date Completed: 25/4/16

Step 1 – Scoping your analysis

What is the aim of your policy, procedure, project, decision, function or service and how does it relate to equality?

To ensure women have the safest care that can be given

What outcomes do you want to achieve?

No incidents – good outcome – good experience for women and their families. Ensure that oxytocin is used appropriately and effectively in labour

What barriers are there to achieving these outcomes?

Not adhering to guidelines and policies – non-attendance at training and education

How will you put your policy, procedure, project, decision, function or service into practice?

Monitoring incidents and ensuring lessons are learned

Does this policy link, align or conflict with any other policy, procedure, project, decision, function or service?

Links with Care in Labour, Electronic Fetal Monitoring

Step 2 – Collecting your information

What existing information / data do you have?

Incident data

Who have you consulted with?

Clinical colleagues

What are the gaps and how do you plan to collect what is missing?

N/A

Step 3 – What is the impact?

Using the information from Step 2 explain if there is an impact or potential for impact on staff or people in the community with characteristics protected under the Equality Act 2010?

Ethnicity or Race

No

Sex/Gender

No

Age

No

Disability

No

Religion or Belief

No

Sexual Orientation

No

Marriage and Civil Partnership (applies to workforce issues only)

No

Pregnancy and Maternity

No

Gender Reassignment

No

Other socially excluded groups or communities e.g. rural community, socially excluded, carers, areas of deprivation, low literacy skills etc.

No

Step 4 – What are the differences?

Are any groups affected in a different way to others as a result of the policy, procedure, project, decision, function or service?

No

Does your policy, procedure, project, decision, function or service discriminate against anyone with characteristics protected under the Equality Act 2010?

No ☐

If yes, explain the justification for this. If it cannot be justified, how are you going to change it to remove or mitigate the affect?

N/A

Step 5 – Make a decision based on steps 2 - 4

If you are in a position to introduce the policy, procedure, project, decision, function or service? Clearly show how this has been decided.

Agreed at Obstetrics and Gynaecology Operational Group, Reviewed at Care Closer to Home Patient Safety Committee and Clinical Standards and Therapeutics Committee and approved at the Quality & Health Care Governance Committee

If you are in a position to introduce the policy, procedure, project, decision, function or service, but still have information to collect, changes to make or actions to complete to ensure all people affected have been covered please list:

N/A

How are you going to monitor this policy, procedure, project or service, how often and who will be responsible?

Step 6 – Completion and central collation

Once completed this Equality Analysis form must be forwarded to Jillian Wilkins, Equality and Diversity Lead. jillian.wilkins@cddft.nhs.uk and must be attached to any documentation to which it relates.