Sundhedsstyrelsen

Nationale Kliniske Retningslinjer

NATIONAL CLINICAL GUIDELINE CONCERNING PRIMIPAROUS WOMEN WITH DYSTOCIA (LACK OF PROGRESS)

Quick guide

Definition of dystocia

In this guideline, dystocia in primiparous women with a fetus in cephalic presentation is defined as follows:

The active phase of the first stage (the dilatation phase):

- Cervical dilatation of <2 cm assessed over 4 hours.
- In special circumstancesthe diagnosis may be arrived at earlier, in case a cervical dilatation of 2 cm in 4 hours is deemed unlikely.

The descending phase:

- When deemed unlikely that the leading part of the fetus will engage to reach the pelvic floor within 3 hours after the start of the descending phase.

The expulsive phase:

- When deemed unlikely that the child will be born within 2 hours after the start of the expulsive phase.

Recent research indicates that the active phase may not start until the cervix has dilated to 6 cm [1-4]. Therefore, evaluate the situation carefully prior to diagnosing dystocia when the cervix has only dilated to 4-6 cm.

Indication for oxytocin augmentation of labour	
√	**The active phase of the first stage** It is good practice to review the progress with an experienced colleague* in case of suspected dystocia in the active phase.
↑	Consider oxytocin augmentation within an hour after diagnosing dystocia in the active phase of the first stage, if the membranes have ruptured and there are <5 contractions in 10 minutes *(⊕○○○)*.
√	In case of dystocia in the active phase, it is good practice – if the membranes have not ruptured – to perform amniotomy and await progress for another 1-2 hours before deciding whether to initiate oxytocin augmentation.
√	**The second stage** It is good practice to review the progress with an experienced colleague* in case of suspected dystocia in the descending phase.
√	It is good practice to review the progress with an experienced colleague* in case of suspected dystocia in the expulsive phase – after 1 hour at the latest.
√	It is good practice to consider oxytocin augmentation in the second stage in case of dystocia and <5 contractions in 10 minutes.
√	It is good practice to consider forced delivery (caesarean section or instrumental vaginal delivery) when the expulsive phase has lasted 2 hours. Forced delivery should be considered earlier if the parturient woman so desires or if the estimated duration of the expulsive phase exceeds 2 hours.
	* Experienced colleague means, e.g., a senior staff midwife or a doctor, depending on local practice. A review of the progress includes, among other things, assessing the following (e.g. the childbirth checklist and the labour augmentation drip package of the Danish safe childbirth ('Sikre Fødsler') project): • Fetal heart rate, including indication for CTG • The perspective of the parturient • Risk factors • Presence of mechanical mismatch • Descent and rotation of the fetal head • Rupture of the membranes • Pattern of contractions • Cervical progress (assessed, e.g., by means of a partogram) • Micturition/bladder voiding (particularly in the second stage). Perspective of the parturient means preferences, need for pain relief and physical and mental condition.

Dosage regimens for oxytocin	
↑	For oxytocin augmentation, consider an initial dosage level of 3.3 mU/min = 20 ml/h when using a solution of 10 IU of oxytocin in 1,000 ml of isotonic sodium chloride solution for infusion (⊕○○○).
√	In the active phase of the first stage (the dilatation phase), it is good practice to increase the dose with 3.3 mU/min = 20 ml/h every 20 minutes until reaching a maximum of 5 contractions in 10 minutes.
√	It is not good practice to let the dosage exceed 180 ml/h = 30 mU/min.[1]

Second-stage dystocia in parturients with an epidural	
√	It is good practice to allow the same duration for the descending phase in parturient women with and without an epidural.

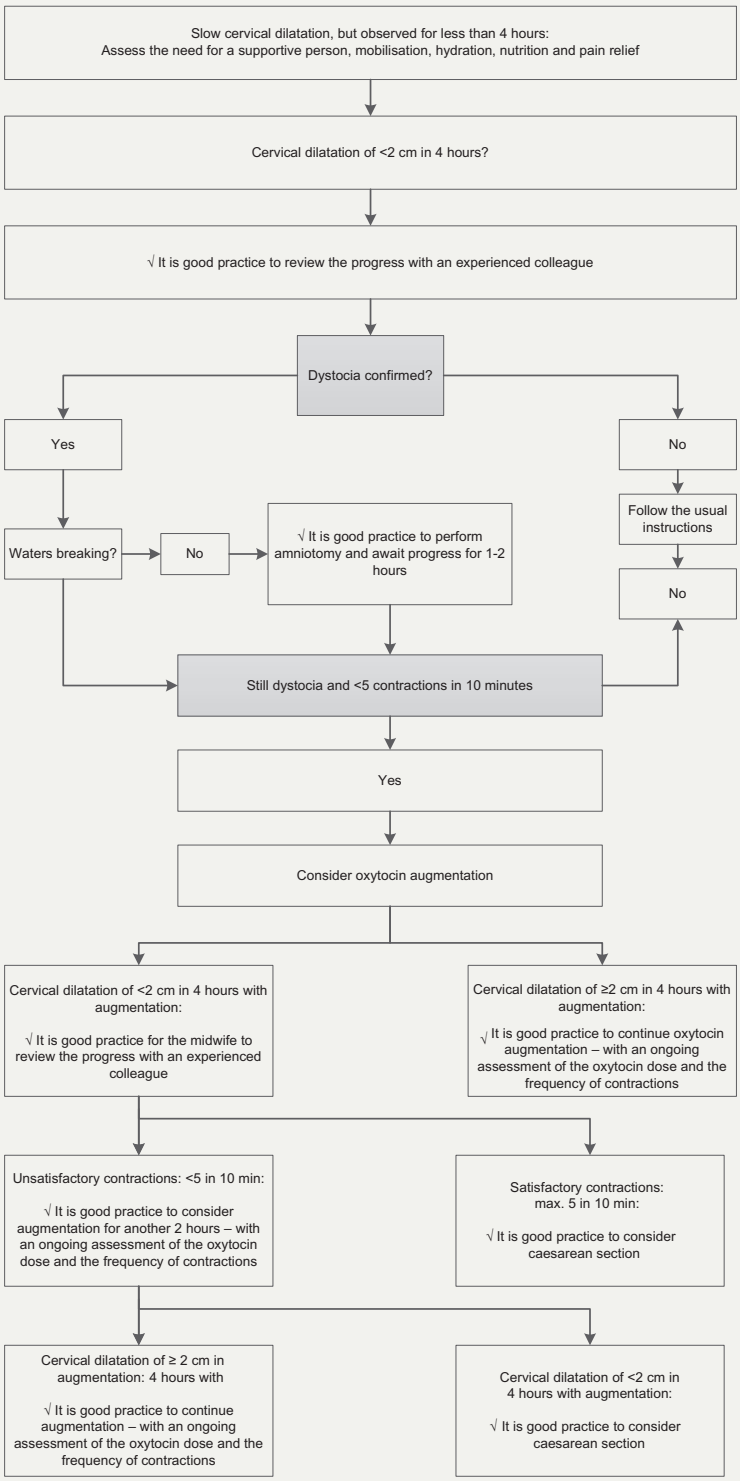
Non-medicinal options	
↑	**Intravenous fluid therapy** Consider offering intravenous therapy using isotonic Ringer's lactate as an add-on to free oral fluid intake in case of suspected dehydration or slow progress (i.e., without waiting for 4 hours and before the criteria for dystocia have been met) (⊕○○○).
↓	**Acupuncture** Acupuncture should only be used as an intervention in case of dystocia afterdue consideration. The available evidence neither demonstrates beneficial nor adverse effects (⊕○○○).
√	It is not good practice to delay relevant options such as amniotomy and oxytocin augmentation in favour of acupuncture.
√	It is good practice to inform the parturient woman about the lack of scientific documentation for beneficial as well as for adverse effects from the use of acupuncture in case of dystocia.
√	**Rebozo** If rebozo is offered, it is good practice to document the use for quality follow-up.
√	When offering rebozo, it is good practice to inform the parturient woman that the effects of the treatment and potential adverse effects are undocumented.

1 The summary of product characteristics for Syntocinon® indicates a maximum infusion rate of 120 ml/h (20 milliunits/min, 40 drops/min), but also mentions that a higher rate may be needed on rare occasions [6]. From clinical experience and the literature review, the working group finds that it may be relevant to increase the infusion rate up to 180 ml/h for special cases and based on a professional judgment, provided the fetal heart rate is normal and the frequency of contractions does not exceed 5 in 10 minutes. The indication for increasing the infusion rate must always be recorded.

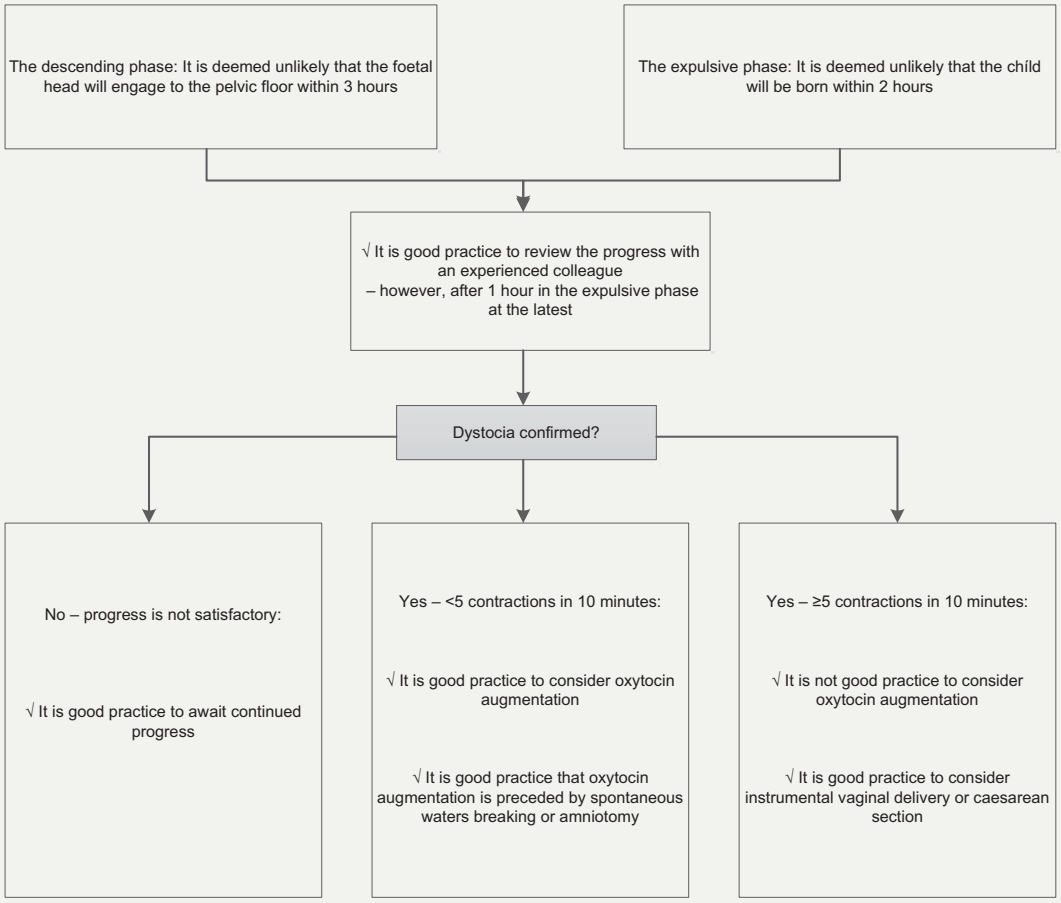
√	**Amniotomy** In case of dystocia in the active phase of the first stage (the dilatation phase), it is good practice to perform amniotomy and await progress for another 1-2 hours before initiating oxytocin augmentation.
√	In case of dystocia in the descending phase, it is good practice to perform amniotomy and await progress for 1 hour before initiating oxytocin augmentation.
√	In case of dystocia in the expulsive phase, it is good practice to perform amniotomy and await progress for 20 minutes before initiating oxytocin augmentation.

Duration of oxytocin augmentation of labour	
√	It is good practice that the midwife responsible for the childbirth reviews progress after 4 hours of oxytocin augmentation in the active phase of the first stage (the dilatation phase).
√	In case of a cervical dilatation of <2 cm after 4 hours of oxytocin augmentation, it is good practice to review the progress with an experienced colleague*.
√	It is good practice to consider an additional 2 hours of oxytocin augmentation if a satisfactory pattern of contractions (a maximum of 5 contractions in 10 minutes) has not been reached within 4 hours.
	*Experienced colleague means, e.g. a senior staff midwife or a doctor, depending on local practice. A review of the progress includes, among other items, to assess the following (e.g. the childbirth checklist and the labour augmentation drip package of the Danish safe childbirth ('Sikre Fødsler') project[5]): • Fetal heart rate, including indication for CTG • The perspective of the parturient woman • Risk factors • Presence of mechanical mismatch (cephalopelvic disproportion) • Descent and rotation of the fetal head • Rupture of the membranes • Pattern of contractions • Cervical progress (assessed, e.g., by means of a partogram) • Micturition/bladder emptying (particularly in the second stage). Perspective of the parturient woman means preferences, need for pain relief and physical and mental condition.

Flowchart for dystocia in the active phase of the first stage



Flowchart for dystocia in the descending phase



About the quick guide

The quick guide contains the key recommendations of the national clinical guideline for National Clinical Guideline Concerning Primiparous women with Dystocia (Lack of Progress). The guideline has been prepared within the framework of the Danish Health and Medicines Authority.

The focus of the national clinical guideline on primiparous women with dystocia (lack of progress) is the indication and administration of oxytocin for augmentation of labour and on selected non-medicinal options that potentially can be used to prevent and treat dystocia.

The national clinical guideline contains recommendations for selected parts of the clinical pathway. It should not stand alone but should be seen in conjunction with local protocols and other guidelines etc. on the topic.

One of the following symbols initiates each recommendation and indicates the strength of the recommendation:

↑↑ = strong recommendation for
↓↓ = a strong recommendation against
↑ = weak / conditional recommendation for
↓ = weak / conditional recommendation against

The symbol (√) represents a good practice statement. This is used in situations where there is no relevant evidence, but the working group would like to highlight particular aspects of good clinical practice.

One of the following symbols concludes each recommendation and indicates the strength of the underlying evidence - from high to very low:

(⊕⊕⊕⊕) = high
(⊕⊕⊕○) = moderate
(⊕⊕○○) = low
(⊕○○○) = very low

Good practice recommendations are not based on evidence and this is indicated by the absence of symbols.

Supplementary material on sundhedsstyrelsen.dk
On sundhedsstyrelsen.dk you can find the national clinical guideline in full (in Danish), including a detailed review of the underlying evidence for the recommendations.

About the national clinical guidelines
The national clinical guideline is one of 50 national clinical guidelines (NKR), which will be developed under the framework of the Health and Medicines Authority in the period 2013-2016.

Further information (in Danish) about topic selection, methods and process can be found on sundhedsstyrelsen.dk.
