## Induction or Enhancement of Labour — The Licensed Directions

- Oxytocin should not be started for 6 hours following administration of vaginal prostaglandins.
- Syntocinon should be administered as an i.v. drip infusion or, preferably, by means of a variable-speed infusion pump. For drip infusion it is recommended that 5 IU of Syntocinon be added to 500ml of a physiological electrolyte solution (such as sodium chloride 0.9%).
- For patients in whom infusion of sodium chloride must be avoided, 5% dextrose solution may be used as the diluent. To ensure even mixing, the bottle or bag must be turned upside down several times before use.
- The initial infusion rate should be set at 1 to 4 milliunits/minute (2 to 8 drops/minute). It may be gradually increased at intervals not shorter than 20 minutes and increments of not more than 1-2 milliunits/minute, until a contraction pattern similar to that of normal labour is established.

In pregnancy near term this can often be achieved with an infusion of less than 10 milliunits/minute (20 drops/minute), and the recommended maximum rate is 20 milliunits/minute (40 drops/minute).

In the unusual event that higher rates are required, as may occur in the management of foetal death *in utero* or for induction of labour at an earlier stage of pregnancy, when the uterus is less sensitive to oxytocin, it is advisable to use a more concentrated Syntocinon solution, e.g., 10 IU in 500ml.

- When using a motor-driven infusion pump which delivers smaller volumes than those given by drip infusion, the concentration suitable for infusion within the recommended dosage range must be calculated according to the specifications of the pump.
- The frequency, strength and duration of contractions as well as the foetal heart rate must be carefully monitored throughout the infusion. Once an adequate level of uterine activity is attained, aiming for 3 to 4 contractions every 10 minutes, the infusion rate can often be reduced.

In the event of uterine hyperactivity and/or foetal distress, the infusion must be discontinued immediately.

If, in women who are at term or near term, regular contractions are not established after the infusion of a total amount of 5 IU, it is recommended that the attempt to induce labour be ceased; it may be repeated on the following day, starting again from a rate of 1 to 4 milliunits/minute.

https://www.medicines.org.uk/emc/product/9736/smpc

## Reading the Licensed Terms of Use for meaning Key concepts embedded in the instructions:

Prescribe a safe diluent for patients with medical conditions.

Dilute Syntocinon for 0.5 mU/minimum volume of pump or drop (drip).

Do not leave the patient alone during Syntocinon infusion and labour.

Palpate the uterus continuously to assess length, strength, frequency of contractions to judge if and when safe to increase the infusion rate.

Do not increase infusion at closer than 20 minute intervals.

Do not increase infusion if rest between contractions less than 1 minute.

Check fetal heart regularly and for recovery after long contractions.

Reduce infusion rate to restrain contractions to 3 - 4 in 10 minutes.

Be prepared to reduce infusion slightly, when labour is well-established.



## Natural Oxytocin during Induced Labour

Intravenous infusion of Syntocinon aims to prompt 'a contraction pattern similar to that of normal labour', thus coaxing the woman's natural oxytocin to be released in response to those contractions.

Natural oxytocin therefore adjusts for the stature of individuals, and by default, for their blood volume.

IF Syntocinon infusion can be reduced once labour is established, and ceased by the end of labour, natural oxytocin is available to fulfil its normal role, to help control blood loss at the end of third stage.