

Transcript

Today I'd like to show you a model ventouse delivery. The indications for ventouse delivery are an abnormal fetal heart rate in the second stage with or without an abnormal fetal scalp pH, maternal exhaustion, and prolonged second stage. There are several different types of cup. Here, we have a silicone cup. We also have metal cups, but for the purposes of this demonstration we're going to use this handheld Omni cup today.

For delivery, adequate preparation of the patient is important and introduction to the patient of yourself, the reasons why you're conducting the delivery, and also to obtain a verbal consent. Lighting should be adequate, an assessment of the patient's need for analgesia also should be undertaken, and then we can then move on to the actual delivery itself.

Would you like to show us how you'd assess abdominally first.

So, first part of our assessment is to make sure that there is no palpable head per abdomen and ideally we shouldn't be feeling any head. Occasionally, we might feel a fifth of the fetal head and I think in this situation you want to be very careful about proceeding with an instrumental delivery and make careful and meticulous your assessment when we move on to internal vagina assessment.

We now move to examining the patients vaginally and the purpose of this is to see that the patient is fully dilated and she is indeed in the second stage. The membranes are absent. We'll also make an assessment of the station of the head. Ideally this needs to be below the ischial spines.

We will also look at the position. In this situation the position is left occipital transverse. And finally, we'll also look at whether there is any caput or moulding and adequacy of the pelvis for delivery. Immediately prior to the procedure, we'd look to catheterize the patient.

We'll now proceed with the delivery itself and application of the cup. Prior to any ventouse delivery, we always need to check our equipment. Even more so, when we're using the conventional equipment and here we can put the cup in the palm of our hand and just check that the application is adequate. When we're applying the cup to the fetal head, we're looking to place the cup in the sagittal plane and just over the posterior fontanel. This is applied over the fulcrum of the baby's head, the pivotal point, to allow safe and smooth delivery.

We're now putting the cup just over the occiput and once we're happy with the placement, we inflate the cup to 0.2 kilograms per centimetres squared. Once we're at 0.2 kilograms per centimetres squared, we check to make sure that there is a proper seal and that there is no vaginal epithelium present. When we're happy with this we then inflate to 0.8, recheck our findings, and make sure there's no vaginal epithelium again.

We're now ready to conduct the delivery. Here, we're going to need an assistant. We're going to need an assessment of the contractions and also to explain to the mother that her pushing is crucial with contractions to aid with the ventouse delivery. No tractions should be done with the ventouse without the aid of maternal effort and uterine contractions.

When we start pulling as the contractions start, the initial axis of the pull is in a downward direction along the axis of the pelvis. As the head comes round and rotates we have a finger just on the edge of the cup. This is present for three reasons. The first reason is to show that there is adequate descent of the presenting part. Secondly, you will feel as the head is rotating around, if necessary. And finally, if there is cup detachment you can identify this at an early stage.

We then continue with the delivery with the axis changing slightly to a more, firstly horizontal and then vertical plane as the head comes around. Our hand then changes position as we assess the need for an episiotomy. It is not mandatory to perform an episiotomy with a ventouse delivery. Second hand then protects the perineum and prevents sudden expulsion of the fetus and as we lift we usually tell the mother to pant and stop traction as the head is born by her extension.

The cup is then released and we will then explain to the mother that there will be small bruising and swelling on the baby's scalp, which will disappear in 24 to 48 hours. The delivery itself, from start to finish, really should be finished within 20 minutes. One should look at that there should only be a maximum of two cup detachments and after each cup detachment you should really look and assess why the cup has detached.

Thank you.