



FEATURE

Preparation for Whelping

Extracts from **THE DOG OWNER'S MANUAL**
by Dr Karen Hedberg BVSc

NORMAL WHELPING

When the bitch goes into labour, there are three stages:

1. Initiation of Parturition

This is when the cervix is dilating and the first visible signs appear that the bitch is going into labour. The bitch is very restless, up and down, circling and ripping up paper. She is usually panting the whole time and constantly wants to go outside and urinate, passing small amounts often. Some bitches have a very short (1-2 hours) first-stage labour, particularly the more experienced bitches. First-stage labour can, however, last as long as 12-24 hours in some cases, though this is more commonly seen with maiden bitches.

You can find an odd bitch who may appear to start, stop and then go into labour 10-12 hours later, but this is not common. This usually happens if there are too many people around and the bitch cannot get any privacy. Keep unnecessary people away while the bitch is whelping – the fewer present the better.

Most bitches go off their food during the last 12-24 hours, but this is no foolproof indicator of approaching labour. No bitch should be off her food for more than 48 hours prior to whelping. If this lack of appetite continues, take the bitch to your veterinarian for a check-up to make sure that all is well. Pregnant bitches cannot afford not to eat because of the danger of pregnancy toxemia.

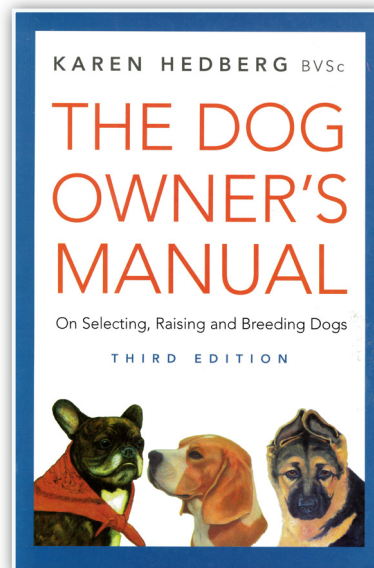
Delayed onset of parturition can also be due to the bitch being removed from her normal surroundings close to term. The less the bitch and her normal environment are disturbed in the last 5-6 days of pregnancy, the better. If the bitch is being whelped by someone else, away from her normal home, she should be installed and settled into her new environment at least a week (preferably two weeks) before she is due. Avoid unnecessary changes around the house at the same time that may require strangers moving in and around the house, e.g. renovations!

2. Delivery of the Puppies

This starts with the breaking of water, which means the foetal membranes have broken as the puppy is moving down close to and/or through the pelvis. As the puppy moves down through the pelvis, a bulge will be seen below the rectum (anus) where the forward half of the puppy is pushing the vulva outwards.

Once the puppy reaches the outer edge of the vulva, it is usually expelled fairly quickly. If the bag is unbroken at this stage, gently tear the membranes to allow the fluids to drain away and the puppy to breathe. See image above of puppy still in membrane.

Most bitches will produce puppies without too much physical effort. Some bitches hardly seem to contract, yet the puppies appear to fly out as though jet-propelled. Other bitches strain, groan and moan and make the most amazing sound effects for the birth of quite small puppies. Every bitch's pain threshold is different, like ours, but the smaller the breed, the more discomfort shown, would be a loose generalisation. Obviously, very large puppies take more time and effort.





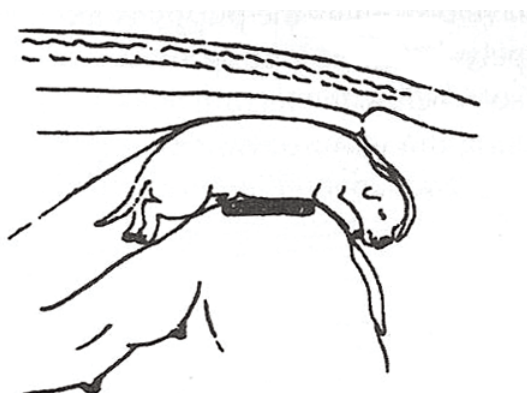
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A puppy is usually born within 20-30 minutes of the water breaking, but it can take up to one to two hours. If a puppy has not been delivered within one, or a maximum of two hours of the water breaking, ring your vet.

This particularly applies to maiden bitches with their first puppy – they decide it hurts to push and can refuse to get on with the job. Alternatively, excessive straining without producing a puppy is equally of concern – there could be a malpresentation or a very large puppy. The two-hour maximum rule generally is long enough to wait where one does not see the whelping progressing.

Normal Presentation

Puppies, unlike human babies, can present headfirst or rear end first with no appreciable difficulties. The chance of a puppy being born either way is fairly evenly divided.



Above: Normal forward presentation.

Below: Normal breech presentation.



Novices watching a bitch whelp for the first time are often horrified to see back legs appear, carrying over this fear from human 'whelpings', where breech births are uncommon and generally cause considerable problems. Breech births or rear-end presentations are for the most part no more troublesome than forward presentations. The only time difficulties may occur is when a puppy in rear presentation has been wedged inside the bitch for a long time.

When the puppy is being expelled through the pelvis, the force of the contractions and the squeezing effect of being propelled through the pelvis assist the lungs to be emptied of fluid. When a puppy is in breech presentation, the fluid is expelled but often re-inhaled to a certain extent as the head is still in the membranes inside the pelvis. Thus a puppy wedged in the pelvis in rear presentation for longer than normal is more likely to have breathing difficulties once it is expelled than one in a forward presentation.

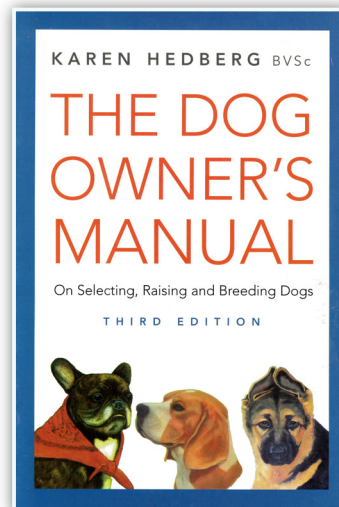
Afterbirths / Placental Membranes

Puppies are surrounded by fluids and membranes during pregnancy which control their environment. There is an inner and outer sack. The central part of the membranes (the placenta) is deeply embedded in the wall of the uterus in the form of a wide band. The puppy is attached to the placenta via the umbilical cord, through which it receives nutriment.

When the puppy is being expelled through the pelvis during birth, the pressure exerted breaks the membranes, leading to the term 'breaking water'. Occasionally, a 'bag' may hang down from the vulva; this is usually just the outer bag that may not have broken and contains placental fluid. Leave this alone unless there is a puppy head or tail close by, as the fluid acts as a lubricant during contractions. If there is a puppy half the way out of the pelvis, gently tear the bag open to allow the puppy to breathe – particularly if the head is presenting.

Once the puppy has been born, the placenta (or 'afterbirth' as it follows the birth) may still be attached and inside the bitch. Quite often, the umbilical cord breaks several centimetres from the puppy's stomach, which may need to be tied off or held for a minute or two.

The afterbirths may follow each puppy, but there can be several puppies born and then the afterbirths may follow in a little group. Do not panic if there is not an afterbirth with each puppy, just keep a rough count of the number of puppies relative to the number of afterbirths passed. When the bitch has finally finished whelping, the numbers should generally tally. Bitches often eat the afterbirths and can be very fast at doing so, so keeping an exact track of numbers can occasionally be rather difficult.





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Assisting the bitch

If a puppy is stuck halfway out of the bitch, i.e., head or rear end presenting and not coming out any further after five minutes (10 minutes maximum), gently pull the puppy out and down, i.e., at about an angle of 45°.



Assisting forward presentation.

Pull with the bitch, i.e. as she pushes, you pull – sometimes in a slight side-to-side motion if the shoulders or pelvis are stuck and downward pulling is not working.

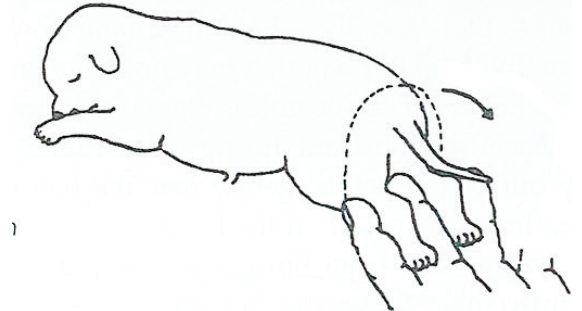
If the bitch is very tired, she may not assist very much. If the bitch is not getting the puppy into the pelvic canal, you can occasionally 'feather' the bitch by placing two fingers inside the pelvis and gently pushing them apart and holding that position for 5-10 seconds, resting for 20-30 seconds and repeating – this will cause the bitch to contract and can be enough to bring the last one or two puppies down and through the pelvis.

If head first, put your first two fingers – one on either side of the neck – just behind the head. Pull gently and curl your fingers back into your hand as you pull out and down.

If the rear end is presented first, pull above the hocks – never grab or pull a puppy around the middle as you can rupture the puppy's liver. With a rear presentation, where the head and shoulders are caught very firmly inside the bitch, gently put your little finger up the side and hook out one elbow. Repeat for the other side and then pull the puppy out and down. Once the shoulders are through, the puppy pops out very easily.



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Assisting rear or breech presentation.

Time between puppies



Above: "Leave the puppies on the bitch as much as possible while she is whelping."

The puppies tend to come in twos, one from each horn of the uterus, so you will often have two puppies being born fairly close together (10-30 minutes), then a break of 1-2 hours and then another two as the puppies gradually move down each horn of the uterus. If there is a large litter, the break between puppies tends to get longer towards the end as the bitch gets tired. The average time between puppies can vary immensely depending on the fitness and age of the bitch, but the average would be one hour.

Usually, the first half of the litter is whelped quite quickly, followed by a break midway through while the front half shifts backwards. When there is a break of more than 2 hours, take the bitch outside to allow her to go to the toilet – pushing against a full bladder can be very difficult! You may need to put the bitch on a lead and drag her outside: they often will not go willingly. After the bitch has been outside, give her some calcium tablets and if she does not kick back into labour after 2-3 hours, you need to contact your vet.

If there is a large litter, the first 'half' will be born fairly quickly, then the bitch may have a break of 1-3 hours while the other half appear to shift down towards the pelvis. Once the 'break' is over, the bitch often gets back down to work and pops the second half out in reasonable time.



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Leave the puppies on the bitch as much as possible while she is whelping. This may sound very obvious, but I have seen many breeders keep most of the puppies away from the bitch as she is whelping – DON'T – it not only distresses the bitch but considerably slows the whelping process.

The puppies suckling on the bitch stimulates the natural release of oxytocin, which in turn helps the bitch's uterus to contract, assisting the remaining puppies to be expelled. For this reason, do not separate the puppies from the bitch. They should remain attached to the bitch for maximum oxytocin release and only remove when the bitch has to go outside or put to one side when she stands up and turns around while expelling a puppy.

A fit bitch will usually whelp much faster than an overweight bitch. In the giant breeds, for example the St Bernard, the lack of muscle tone can create problems as the first half of the litter is usually delivered reasonably well but then muscle fatigue sets in, reducing the chance of the puppies surviving up in the top (forward) end of the uterine horns.

3. Expulsion of the Foetal membranes

The afterbirths are passed either with or between puppies and the bitch is often very fast in cleaning the puppies and eating the afterbirths. This is quite a natural procedure and it is a good source of protein for the bitch, but it can cause her to vomit or to have loose motions after she has finished whelping. Generally, I allow the bitch to eat one or two afterbirths and then remove the rest as they arrive, so that there is little cleaning up later on, but the bitch may beat you to it!

Dealing with the Umbilical cord

If the puppy has been expelled by the bitch but is still attached by its umbilical cord, put your fingers on either side of the cord and go up as far as you can into the bitch, clamp your fingers and gently pull against the bitch. Never pull against the puppy. Usually, the afterbirth will come out if you pull steadily. The cord may break as you pull, but the cord will usually stop bleeding if you hold it for 1-2 minutes.





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When the cord breaks very close to the puppy, or the cord will not stop bleeding, clamp your fingers over the end and get some cotton or linen thread and tie around the base of the cord near the abdomen. Tie it firmly but don't pull too hard or the cotton can cut through the cord. Cut the knot off very close to the cord so the bitch cannot tug it off. The cotton will fall off with the cord when it dries in 2-3 days. (Have some pieces of thread to use for tying off ready before the bitch whelps – running around holding a bleeding puppy while you find things is not good.)

If the cords are very long and/or the bitch does not eat the afterbirth or break the cord, cut off the afterbirth 8-10cm away from the abdomen after 3-5 minutes with a blunt pair of scissors or tear it with your fingers. After a couple of hours, when the cords are dry, cut them off about 3-5 cm from the abdomen, otherwise, the cords can get tangled around the puppies' legs and toes and cut off the circulation.



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Occasionally there can be a tear at the base of the umbilical cord, causing bleeding and an open abdominal cavity from which the intestines can protrude. Place a tissue over the hole and lightly tape it around the abdomen. Ring your vet immediately – this will have to be sutured immediately to prevent infections and/or further loops of the gut from protruding. Not all of these puppies are able to be saved and generally only those that receive fairly immediate veterinary treatment survive.

When the bitch has finished whelping, she will settle down, accept food and the panting will slow down. Some bitches do, however, have a rest mid-whelping, so be on your guard. A bitch that has finished whelping will have a reddish-brown discharge. If there is a green discharge, there are usually more puppies and/or afterbirths. A bitch that has

finished whelping looks very "hollow" in the flanks and there are no large objects when one feels across the abdomen. You can quite often feel a thickness which is the involuting (shrinking) uterus. This can occasionally feel like another puppy is still present, but with no discernible head or rear end. This will further shrink after another hour, so if the bitch is relaxed and not straining leave her alone and recheck – if the uterus still feels enlarged and there is a greenish discharge, the bitch may still have either further afterbirths or another puppy.

To be certain that the bitch has finished whelping and has passed all the afterbirths, take the bitch down to the vet several hours after she has appeared to have finished. If she whelped during the night (as 70-80% of bitches invariably do), wait until a respectable hour of the morning (out of kindness to your vet), then take the bitch and the puppies for a check-up and an injection of Oxytocin to clean the bitch out.

If you think there is a problem and the bitch still has puppies left in her and it has been more than 2 hours (3 hours maximum) from the last puppy, ring your vet, even, as much as I hate to say it, if it is in the middle of the night. Do try to consider the health and well-being of your vet before doing this. I like my clients with possible problem whelpers to notify me the day or night before they expect the bitch to whelp, so if there is trouble, everyone is (reasonably) organised around the situation.

With a bitch (and/or breeder) that is experienced and where the bitch has whelped cleanly, without any problems, has passed all the afterbirths, has a normal reddish discharge and settled down well; it may not be necessary to take the bitch to the vet. Ring your vet at a reasonable time, explain how the bitch has whelped and how many puppies she has had and let your vet decide if there is a need to check the bitch.