Breeders - Whither Goest Thou ?

It seems surprising in a natural working breed like the Welsh Corgi that the percentage of whelping difficulties is consistently increasing. Whelping troubles in any bitch and particularly so in a bitch of any working breed should be a rarity. The ancestors of our present day show dogs would have been easy natural whelpers, as the difficult whelpers or their progeny would not have survived. Since the advent of modern veterinary science this is changing. There is more money to be made by breeding and selling pedigree dogs. Dog showing has become big business in many parts of the world, and the demand for pedigree dogs is constantly increasing. Before the development of motor transport veterinary surgeons were, in the main, "horse doctors" and only treated dogs occasionally and there had been no extensive study made of the diseases and treatment of dogs.

With the coming of sulpha drugs and the antibiotics veterinary surgery lost a lot of the dangers of sepsis that were more common than in human surgery because of the bacteria carried in the body hair of animals. Because of these developments the treatment of whelping difficulties by surgery has become commonplace. The operation itself is not new to veterinary science, the first written record of its successful performance in England being in 1839. But it was usually used only as an heroic measure as a last resort and in its successful performance the bitch was rarely ever bred from again. But now in this wondrous era of antibiotics and tranquillizers, not only is the risk of infection greatly reduced, but also the risk of losing puppies from anaesthesia is to a great extent overcome. The dangers of the operation have been reduced so much as to become a routine measure and reasonably safe.

The operation for Caesarean section is much easier for the busy practitioner than the waiting, sometimes prolonged, for nature to take her course. In the latter case a Caesarean section may become necessary towards the end of a whelping when the bitch has become exhausted and thus much more prone to shock and infection, increasing the dangers of the operation. The second reason for the necessity of a Caesarean section due to difficult whelping is the certainty that all the puppies are born - it is not uncommon even for the X-ray to mislead. Breeders, too, have accepted the use of Caesarean section on their difficult whelpers as a routine measure. So it is quite obvious why the more difficult whelpers are now bred from and how easily into a strain are difficult whelpers bred.

Why do we have difficult whelpings? Difficult whelpings may be divided into two categories:

1. Foetal abnormalities - where the foetus is too large, the head of the foetus too large and because of malpresentation of the foetus. These abnormalities occur occasionally in all breeds and in all bitches. Qualified assistance is definitely indicated and these days operation is usually resorted to as a life-saving measure for both the bitch and the puppies.

2. Maternal abnormalities which can be considered under a number of sub-headings:

(a) The twisting of the complete uterus within the abdominal cavity so that normal parturition becomes impossible and a Caesarean section must be performed - these cases fortunately are extremely rare.

(b) Spontaneous rupture of the uterus during labour; once again very rare, incorrect nutrition may possibly play a role in these cases.

(c) Inguinal hernia in which part of the uterus has become involved and the puppies have developed within the hernial sac and, of course, cannot be born normally. Hernias are not uncommon and it is always wise to examine a bitch carefully before mating each time as the hernia may be almost unapparent until pregnancy occurs when there is a risk of strangulation occurring to the uterus within the inguinal canal, causing death through infection of the strangulated part. The tendency for the development of inguinal hernias has been found in many cases to be hereditary.

(d) Uterine inertia—the absence of uterine contractions at term, i.e. labour:

(i) primary inertia, of which there are several causes:

(1) lack of muscle tone in the wall of the uterus due to lack of exercise, excessive fatness and dietary deficiency;

(2) overstretching of the uterus in cases of excessive foetal fluids within the membranes of the foetus and in bitches carrying an excessive number of young;

(3) Hormonal deficiencies which in a number of cases are probably hereditary as the trouble occurs mainly in particular strains of various breeds;

(ii) Secondary inertia which is the inertia of exhaustion and is essentially a result rather than a cause of difficult whelping. It occurs most commonly when there is a malpresentation or an abnormally large foetus blocking the passage of the other foetuses and assistance is not sought when it is apparent that the bitch has been straining without result for half an hour and the uterus becomes exhausted and labour does not proceed with the usual whelps behind the obstructing puppy.

And the final cause of maternal abnormality of whelping is:

(e) Pelvic abnormalities, which to my mind is the main cause for the distressingly large increase in whelping difficulties in the modern show bitch. This is the indication for operation which is used by breeders who plan to have a Caesarean section performed on their bitches. This indicates the lack of forethought among breeders to select stock with points that are compatible with normal health and reproduction. How quickly man can produce a race of freaks which are incapable of reproducing their own kind normally and naturally!

The pelvic abnormalities which cause a bitch to be unable to deliver her pups normally are broadly:

1. Upright pelvis - where the floor of the pelvic bones is directly under the sacrum instead of behind and below the sacrum. The upright pelvis occurs in animals with an abnormally high tail setting often associated with a straight stifle joint and its consequent lamenesses. A fault quite common in the short-legged breeds where faulty conformation has been forgiven because the animal is low to the ground. However, fortunately, most breeders and judges these days condemn the straight stifle.

2. Goose rumps, where the drop in the topline occurs at or in front of the sacro-iliac joint, i.e. at or just in front of the haunch bone (also spoken of as the pinbone in canine circles). A few of these cases may be due to accident and faulty nutrition but in the majority of cases they are inherited. Here there is a flattening of the pelvic girdle so that there is insufficient room from the roof to the floor for the passage of a foetus.

3. Exaggerated lowness to the ground with a shortening of the bones in an animal with exaggerated angulation. This fault appears to be getting rather widespread among Welsh Corgis. The shortening occurs most markedly in the humerus, i.e. the bone of the upper arm - between the point of the shoulder and the elbow joint; and also in the femur, i.e. the thigh bone between the hip joint and the stifle joint. Because of this shortening of the bones, the angle made at the pelvis with the thigh becomes too acute so that the pelvis is laid too much in the horizontal plane and does not leave sufficient room from the roof to the floor of the pelvic girdle for the passage of a normal sized puppy. Admittedly the appearance of the animal is very nice, being very thick-set and very low to the ground and moving soundly both fore and aft; but is there sufficient length in the stride and could an animal of this conformation do a day's work on a rugged Welsh hillside?

4. Rickets and other rare causes can give a narrowing of the pelvis but this is very uncommon today because of the care in feeding of pedigree dogs.

5. Accidents to the pelvis.

Now we have covered most if not all the causes of difficult whelpings. As you can see they are many and varied. Which are the commonest? Glancing briefly through my casebook, I see very few cases due to foetal abnormalities - when these come in in time, we usually use a forceps delivery for the difficult puppy and the rest of the litter are born normally. We have never seen, fortunately, twisting of the uterus or spontaneous rupture. We have performed several Caesarean sections due to puppies being confined within an inguinal hernial sac, but mostly the hernias become apparent about midterm and if the rupture is reposed then the whelping usually occurs naturally. Quite a few Caesarean sections we perform are due to secondary inertia, a few due to primary inertia - mainly familial, but a few due to overstretching of the uterus. From notes made of the cases of secondary inertia and other causes, we find a large proportion of Caesarean sections (in this practice) are due to faulty construction of the pelvis.

It is in the hands of the breeders in Welsh Corgis - a working breed - to overcome the increasing number of difficult whelpings. How can you do it; To start with, a breeder should be equipped with a knowledge of the correct conformation of the dog. Many of the old breeders have this knowledge and are usually only too willing to share their knowledge with the newer breeder. Bearing this in mind select only sires with good hindquarters and whose parents possessed good hindquarters and whose progeny from different bitches on the whole possess good hindquarters with the correct angulation. Do not use sires with any tendency to anatomical faults, particularly those listed above. Do not continue to breed from a bitch which has had difficulty whelping because of maternal abnormalities. Remember, even primary inertia is an inherited defect and breeding from such a bitch will only give rise to a line of difficult whelpers - neither pleasure nor profit to be found with these for the breeder.

Beware of exaggerations in your stock - for example, a Welsh Corgi should be low to the ground but not too low, hindquarters should taper slightly but not too markedly, when viewed from behind the hocks should be set well apart but not too wide.

Select breeding stock - both dogs and bitches - from lines which are noted for their easy breeding ability. You will usually find that these are also the strains noted for their soundness and usually but not always, their good action.

The stud dog owner should advise the novice about the conformation of their bitches. If a novice has a bitch with faulty hind construction and still persists in wishing to breed from her, then insist that she should only be mated with a completely sound dog from completely sound parents.

Finally, remember to feed both wisely and well, and that the brood bitch should be fit and hard in condition with plenty of exercise. Whelping should thus become a pleasure with eager expectation for each new litter, instead of a worrying anxious waiting, wondering what will go wrong and how much of the profits will be taken up with the attendant veterinary expenses.

Glossary of terms used
Foetus - the young of animals before their birth.
Inguinal - pertaining to the groin.
Sacrum - a triangular bone at the base of the vertebral column emitting with the haunch bones to form the pelvis.
Sacro-iliac - pertaining to the sacrum and ilium.
Ilium - the upper partly-flattened part of the hip-bone.

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