Neonatal Maladjustment Syndrome
By Kay Burke

Neonatal Maladjustment Syndrome (NMS) sounds like quite a mouthful and until 14 years ago I hadn’t heard of it. In fact even today some vets who are not in an equine practice do not recognize NMS in the new born foal and a good friend recently had the same experience as I had with a vet who had never heard of it and who put her foal which wasn’t as bad as mine straight down.
Let me explain it to you by sharing an experience I had when I looked out of the window on a sunny spring morning to see one of my mares running up and down the fence line of a neighbouring property in a very distressed manner.
As this mare was due to foal I hurried down and found a colt foal wandering around the next door paddock appearing to be blind and with no sense of direction or attachment to its dam.
After quite a struggle (it was a big foal out of a Welsh! Arabian mare) I managed to get him back through the fence and carry him the 400 metres to the stables with his dam running distressed interference all the way.
The mare Ardrieanna was one of those mares that you couldn’t get near unless she needed help when she was never backward in letting you know about it.
She allowed me to try to get the foal to suckle for quite a long time but to no avail. He just wouldn’t settle and had no idea of sucking at all he simply wanted to walk and walk.
I phoned the vet who came out, checked him over and said ‘We better put him down’ but to me at this stage this was not an option as he was still quite strong, so I milked the mare into a clean bottle and using a soft lambs teat tried to feed him but again to no avail.
The vet then reluctantly tube fed him as by this time he was getting weaker and that vet didn’t have a clue as to what was wrong with him and at this stage nor did I.
I called in a second vet but with the same result neither of them had experienced this before and didn’t know what caused it or what to do for it.
Just a shame that they didn’t pick up one of their text books and have a look because that is where I eventually found it.
Fortunately we now have a couple of top Equine Veterinarians in this area who are really on the ball but this story had a sad ending which prompted me to write this article which may save your foal’s life.

NMB is also now commonly known as: Barker, Wanderer, Dummy or Convulsive Foal Syndrome.

The foal I had fitted all of these descriptions. The cause of this condition is not yet fully understood but is thought to be caused by a brain haemorrhage or swelling around nerve cells of the brain due to oedema (waterlogging of the brain).
Causes may come from low oxygen concentrations in the blood and /or high blood pressure surges circulating through the brain.
This may result from a prolonged birthing process or from damage to the chest during birth which may cause damage to the heart muscles which will impair the circulation.
Damage to the brain will cause convulsions with severe behavioural problems. This can lead to a disturbance in the balance of organ functions. Okay enough of the technical stuff as it will be of more use for you to know the symptoms and how to treat the foal and when to call for help.

Strange behavioural signs usually occur from birth through the first 24 hours of the foal's life. These foals do not survive in the wild as if predators don't get them exhaustion and dehydration will.

SYMPTOMS
The foal may appear to be blind and walk into objects including its mother or it may be unable to stand at all... It may make violent and galloping movements with its limbs or it can be totally disorientated. Convulsions can set in and there is inevitably the loss of the SUCK REFLEX. On the other hand some foals exhibit a very determined sucking motion with the head and neck in a stiff very upright position but are unable to adopt the correct nursing position. Another symptom is head and neck stiffly extended with limbs extended and tail held upright.

All in all it is a terrifying experience for the foal, the mare and the owner.

This is not usually something you can handle without the aid of your vet, so do not delay in calling him as soon as you notice any of the detailed symptoms and describe them to him and ask for his help as there are treatments that can save this foal.

If your vet doesn't seem to know what is wrong tell him your thoughts on the matter and don't be afraid to ask for a second opinion. Remember your vet is only human and humans do make mistakes.

TREATMENTS:
To help the NMS foal your vet will give it a symptomatic and supportive treatment as required.

You will need to keep it in a well padded stable but with its mother present so that her bond with it is not lost and so it can as it starts to recover bond with her. The foal needs to be in a stress free, warm and very quiet environment to speed up its recovery. Please keep children and visitors away until it has time to recover. Convulsions can be kept under control by various types of anticonvulsant drugs which are recommended by and administered under your vet's direction. Until the drugs take effect the foal should be gently restrained.

This can be achieved by sitting on the stable floor and holding it down gently with its head on your lap to stop it injuring its eyes (an old foam mattress comes in handy here). A second pair of hands can be helpful to steady the foal by holding the very top (butt) of its tail with one hand and putting gentle pressure on the side of its rump with the palm of your other hand to hold it down and keep its body in line with its head which is in your lap.

Its legs should not be held together as this can make it struggle more. Once the anticonvulsant drugs have taken effect the foal should sleep for some time so relax and grab a quick cuppa but do stay with it.
The foal will need to be kept hydrated and warm if it is to survive, so the vet will probably put it on a drip, if when it comes around it still can't or won't suckle then your vet must tube feed it.

In extreme cases the vet may leave the tube in and tape it so that you can feed the foal with a syringe down the tube at regular intervals.

Those first 2 to 3 days after the foal is born are crucial to its survival and it must have as much of its mother's first milk as possible.

Every year when my first two foals are born I milk the mares into sterilized bottles, seal and label them, then freeze them just in case I have an orphan foal or problem mare.

If the tube is to be taken out after the foal is fed:- Make sure it is flushed with a normal saline solution before removal.

This prevents milk being deposited in the nasal passages as this can be inhaled and cause infection.

The foal may need to be on anticonvulsant drugs for several days and your vet will advise on this but the sooner you get the foal drinking from its mother the better.

The survival rate of these foals is good as long as they are treated immediately. As soon as they are back to normal, they should if they have bonded to their mothers be turned out with them to live as normal horses until the foal is ready to wean.

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