

Dear Neil,

Subject: Re: Toe abscess in first calving heifers

I have a client where currently I have seen 40 heifers out of 100 that have toe abscesses. These are 2 year old first calving jersey heifers (recently calved). Most, although lame in only one claw, when you nip the other claw, have a defect(hole) as well in the second. The lame claw always has dirt and or pus. It is almost exclusive to the hind feet. Some have both hind feet affected.

You can see pin prick black entry holes in the toe  
Jon

Dear Jon,

You have an interesting problem. 40 out of 100 is a huge problem and has to have an explainable combination of causes.

Because both feet are affected, the background has to be either systemic (eg a feeding related and affecting the laminae) and/or behavioral (eg. skidding on hard surfaces).

Systemic: First I would look into the transition diet of the heifers. Was enough roughage fed as they were introduced to concentrate? Make sure the roughage was fed first. Was the introduction of concentrate done over a couple of weeks gradually or too quickly? (In this case the heifers had only been in milk for 4-6weeks and before that were grown out on grass pasture)

Behavioural: When heifers are first introduced to hard surfaces they have to learn to walk on them. Any pressure when herding them will cause them to try to walk up on their toes - just like calves. Older cows are smart and under pressure sit back further on their heels. If heifers skid on concrete it is usually their toes that take a lot of the pressure and damage. This is evident from the wear of the walls on both hind lateral claws and also on the walls of both medial front claws.



I have seen cases in heifers exactly like what you have in these pictures.

In nearly every foot the soles are taking the weight of walking in the toe area because the walls are so worn down. I would speculate that it is more common in the *toes* of heifers because of their tendency to go up on their toes as they skid on hard surfaces compared to cows who respond differently.

The question is, are they separations of the white-line or sole penetrations. They often look more like white-line but hardly ever do they continue up to the coronet. The ones I see nearly always (maybe 99%) underrun the sole and eventually burst out medially near the heel between the

bulbs. When I treat them I pare all the underrun sole off from the toe to the heel if it goes back that far, or else the lameness recurs - in some cases 2 to 3 weeks later as gravel from the track gets in between the separated sole and the corium. It is amazing how quickly the pain goes when the pressure of pus is released. You can't put a block on those with both claws affected on the same foot! I hardly ever use antibiotic for these (maybe 2 out of 100). I tell my farmers that my aim is to get air into there because air is cheap and has no milk withholding!

It would be very interesting to go along at milking time and see how the animals are handled. The farmer needs to learn from this serious outbreak how to better handle his herd on the concrete.

Combination of Systemic and Behavioural: With concentrate fed heifers, (in Victoria, Australia?) I am guessing, but if you had a mild laminitis causing rotation of the pedal bone, the toe area could be the first place to break down if the heifers are put under herding pressure.

With our grass fed cows in New Zealand we usually get white-line separation in heifers when there is herding pressure rather than toe abscesses.

Neil