Fig. 1. Burdoch on the grooming table ready to have his claws ground, age 10 years.

Burdoch's Life with SLO
by Polley Ann McClure

Calleigh Burdoch o' the Pinnacles (Burdoch, Burdie) was born on June 25, 2003 and came home with my husband and me at 8 weeks of age. He is our second beardie and we hoped he would be interested in agility since our first beardie, Ivy, was getting older. He was a very healthy, smart and active puppy, delighting and testing us all, including Ivy who did her best as step mom to teach him proper beardie manners.

The first indication of claw problems came when Burdie was about 1 year of age and suffered a broken dewclaw. Over that next year he had several more broken claws which usually did not completely detach from the nailbed. We took him to his regular primary care veterinarian who recommended surgical removal of the hanging claws. This did end his pain and the prescribed antibiotics cleared up any infections. Once when we were attending Say Yes Puppy Camp in Ontario, he went over a very low jump, lightly ticked the bar with his paw and limped very painfully from the field, his paw quivering from the broken claw.

That experience told me that this was not just a case of "bad claws" and I began to research using the web. At this time (2004) even though we live in the town with the Cornell School of Veterinary Medicine, many primary care veterinarians did not seem to know anything about Symmetric Lupoid Onychodystrophy (SLO). Recently, a name change to symmetrical lupoid onychitis has been proposed to better describe all the pathologic changes seen in the tissues. I found the SLO dogs Yahoo group (http://groups.yahoo.com/group/SLOdogs/) and studying their resources convinced me that this might be what was wrong. One of the articles in the SLO

archive was by Drs. Scott, Rousselle, and Miller of the Cornell School of Veterinary Medicine. I took a copy of that article (1) to his primary care vet and they agreed that this sounded like what was going on with Burdoch.

At the time I worked at Cornell, and was delighted to find the men who originally described SLO right here! So I made an appointment for Burdoch to see Dr. William Miller, who has over the years become a very good and trusted friend to me and an advocate for Burdoch in terms of health care. Dr. Miller told me that the only way to be sure if Burdie had SLO was to amputate a toe, which he did not recommend. His suggestion was to try treating Burdie with a regimen known to help with SLO and if he improved, that would be a reason to believe he did have SLO. The initial treatment was Ketoconazole 250mg once a day for 60 days to clear up a secondary fungal infection. When the problem persisted, Dr. Miller prescribed tetracycline (500mg 3 times per day) and niacinamide (500 mg 3 times per day) and fish oil (Dermcaps). Burdoch responded well to this medication and while he did continue to have other broken claws, most of the time, he was fine. He was prescribed Zubrin® for temporary relief of pain, but no surgical removals of claws were performed. He has never again suffered the complete loss of all claws like he did that first year.

During the first year he was under Dr. Miller's care, he returned for claw checks approximately monthly and normally had his claws trimmed during these visits. In July of 2005, we decreased the number of tetracycline and niacinimide to twice per day, but after about three months, he began to have more broken claws so the dosage was increased back to the original level. I found, however, that agility was a factor in causing the claws to break and after much effort to find ways to continue without hurting him (such as avoiding the A-frame, wearing booties), I gave up agility with Burdoch.

In 2006, there was chatter on the SLO list about possible dietary causes for SLO. I asked Dr. Miller about that. His initial sense was that diet was not a cause, but offered to work with me to test whether it was. So for about 2 years, Burdie ate only a special kibble with kangaroo meat and oats as the protein source (Eukanuba Response KO) and he was given no food that was based on proteins that he had been fed earlier in his life. For example I made treats from almond butter instead of peanut butter. He could have venison or bison meat but no chicken, turkey, beef, wheat, corn, etc. He continued his medications and continued to have sporadic single claw breakage at about the same frequency as before. At the end of about 2 years, we transitioned him back to regular dog and people food with no real change in frequency of claw problems, leading Dr. Miller and me to conclude that his diet was not causing or helping the claw problems.

In November, 2005, Dr. Miller suggested switching his medication from tetracycline, niacinamide, and fish oil to pentoxifylline (400mg 3 times daily), niacinamide (same dosage) and fish oil. In November, 2006, we discontinued the niacinamide but continued pentoxifylline. In April, 2010, the pentoxifylline dosage was reduced to 600 mg once daily. No changes in frequency or severity of problems were noted with these changes.

In 2006 I began to grind his claws with a Dremel and my goal was to keep them as short as I could get them. The combination of pentoxifylline and Dremeling has been very successful and this was his regimen until very recently. My personal belief is that grinding his claws very short is the single best thing to keeping him healthy and painfree. If I slack off my regimen of

grinding them every single week and several weeks go by, he suffers a break. Also, I have learned from Dr. Miller that the early surgical removal of broken claws was the wrong thing to do because it probably damaged the nail bed. Because of this, his claws are deformed and when they get long, they curl and become painful. When they are kept short this does not happen.

Fig. 2. Burdoch's claws just prior to weekly grinding, still very short.

Unfortunately there have been several occasions when I have forgotten the weekly Dremeling and if the claws get too long, they are painful and Burdie no longer is willing to have me grind them. In those instances, I have taken him to Cornell and Dr. Miller has administered a mild tranquilizer and trimmed/ground the claws after which I could keep them in check. In 2008 after a lapse in Dremeling led to overgrown claws, Dr. Miller agreed that we should have his dew claws completely removed surgically, which was done, eliminating the most difficult grinding task and the most often painful problem.

There are many references available about how to Dremel a dog's claws, so I'll just give the brief version of what I have learned, specifically about grinding Beardie claws. While it might be possible to do this job alone, I have found that it takes two people, one to hand out treats, and one to run the grinder. I drape towels over his body to keep his coat from accidentally being caught in the grinder (Beardies do not appreciate having their coat wound around the Dremel). I pull the hair on his leg up away from the paw and shave the toes.

Fig. 3. Clipping the hair from Burdoch's paws before grinding.

(When the hair falls back, you don't see the shaven "poodle paws" as we call them.) The shaven paws keep hair out of the grinder and also help to keep the claws dry after walks in dewy grass or swims, etc. I have an old sock top with the foot removed which I slide up over the paw/leg to hold the leg hair back away from the paw when grinding. Burdie still doesn't love having his claws ground, but with a couple of hot dogs and string cheese as payment, he tolerates it pretty well as long as his claws are kept short.

Fig. 4. Grinding Burdoch's claws with a Dremel tool. Note the sock on his left leg to keep the hair from getting caught in the grinder and his "poodle paws" after they have been trimmed.

Burdoch is now past his 10th birthday. He experienced a mysterious illness last winter (still undiagnosed by all the specialists) that resulted in multiple medications for several months. After a discussion with Dr. Miller, we discontinued the pentoxifylline while all of this was going on. He has not had it now for about 7 months and has no indication of any claw problems. He is pretty much recovered from the illness and discontinued most of those medications, but Dr. Miller suggests not re-starting the pentoxifylline as long as he isn't having claw problems. So his current medications are fish oil, Dasuquin, and a couple of others dealing with some pain in his rear end unrelated to SLO.

Throughout the past nine years of course I have wondered about the cause of SLO but I don't think there is a good answer yet to that question. Some researchers say it is an autoimmune response. Many people assume that it is hereditary. I have examined Burdoch's pedigree and questioned the owners of his dam and sire about other dogs in their lines with the problem. I've found a dog in both lines, distantly related, who is described as having some type of "claw problem", but if SLO is inherited, it is probably a complex, multi-gene effect. However we have not bred Burdoch because we would never want to risk contributing to the frequency of this trait in the beardie gene pool. We have contributed DNA samples to several research projects in hopes of helping to avoid the pain of SLO to beardies in the future.

I guess the bottom line of Burdoch's story is that SLO is a lifelong illness. SLO can be a self-perpetuating problem for the dog. Damage done during an active flair can result in scarring of the nail bed which will increase the deformity of the claws making future care even more difficult. Because of this all flairs should be addressed promptly to avoid this additional scarring. For us this has meant certain medications forever, ongoing attention to adjusting/changing these as necessary, and some limitations on his activity. If SLO is not

actively treated, it can make a dog's life a painful misery, but if they are given good veterinary care, medications, and regular pedicures, they can live long, happy and healthy lives. I still don't think agility competition and the training associated with that would be good for Burdoch, but he does enjoy running a course now and then for fun. He runs, swims, wades in the mud, goes to the swamp next door when my husband sneaks him out, and enjoys all the doggie pleasures we can give him. As far as we can tell, he doesn't experience pain from his SLO as we are managing it.

1 Scott, D.W., DVM, S. Rousselle, DVM, and W.H.Miller, VMD, Diplomate ACVD. 1995. Symmetrical Lupoid Onychodystrophy in Dogs: A Retrospective Analysis of 18 cases (1989-1993). JAAHA 31: 192-201. (available in the BeaCon Library)