

Living with... Pyometra Written by: Linda Aronson, DVM

Pyometra is a relatively common disorder of older intact bitches. Either estrogen or progesterone can cause thickening of the inner lining of the uterus (cystic endometrial hyperplasia - CEH). Exposure first to estrogen and then progesterone (as in the normal heat cycle) produces maximal thickening. As bitches age the likelihood and level of thickening increase progressively, and by age 9 two-thirds of bitches will have some signs. Bitches that receive estrogen or progesterone to terminate pregnancy or suppress estrous are more likely to develop CEH. During proestrus and estrus the cervix opens allowing bacteria normally present in the vagina to ascend into the uterus. These bacteria are the ones that invariably cause pyometra. It has nothing to do with the stud dog, and this process occurs whether or not the bitch is bred.

In bitches with CEH, bacteria colonize the thickened uterine lining and aren't expelled as they would be in a normal bitch. Once diestrus begins the cervix closes and bacteria can no longer exit. Progesterone prevents uterine contraction while stimulating secretion by uterine glands to nourish the fetuses, but also the accumulated bacteria. White blood cells, secretions and bacteria fill the uterus, and antibiotics cannot diffuse into this sea of pus. The pressure of the fluid may cause the cervix to open (open pyometra), but this doesn't occur in all cases. The infection may cause secondary kidney damage, which may be irreversible. Pyometra also causes suppression of the immune system by direct effect on the immune cells. While pyometra is more common as bitches age, it has been reported in bitches under a year old. It is also more common in bitches that have never had puppies.

Clinical signs are usually seen within 12 weeks of estrus. The most common sign is a thick, creamy discharge that is usually foul smelling and sometimes resembles tomato soup. Closed cervix pyometras generally produce more severe signs including fever, abdominal distension, vomiting, increased thirst and urination. After 24 days ultrasound can be used to distinguish pyometra from pregnancy in a bred bitch. An elevated white blood cell count, with young cells predominating, indicates active infection. Anemia may be present. Diagnosing a mild infection can be problematic.



Spaying is by far the preferred treatment. Pyometra is progressive and CEH is irreversible. The dog will be predisposed to pyometra for life. Medical treatment should only be attempted in young bitches that seem healthy with open cervix pyometras. It consists of antibiotics to control infection – which are not very effective, along with either prostaglandins to cause uterine contraction, or antiprogestogens (like RU486) to lower progesterone concentration. The former is more commonly used in North America. In theory, the increased pressure of the contractions will cause further opening of the cervix and the uterus will expel the infected fluid. However, if the uterus fails to open fully it may result either in uterine rupture or backflow into the abdomen, both will cause peritonitis and usually death. The antibiotics are ineffective until the pool of pus and bacteria is cleared from the uterus, and meanwhile the toxins they produce continue to damage the bitch. The infection is never completely eradicated but reduced to a subclinical level.

If medical intervention is attempted not only should the bitch be young, in good body condition, show no signs of secondary illness and have an open cervix pyometra she should be a very valuable member of a breeding program – even for appropriate candidates the treatment is painful, and many vets will not attempt it. She should be bred on her next season, monitored closely for likely pyometra and then spayed after the puppies are weaned, assuming she makes it through the pregnancy, whelping and lactation successfully.

We are lucky to have not one but two detailed accounts of breeders whose bitches developed pyometra. Both were open cervix, both had been bred, both breeders were extremely attuned to their dogs. Neither bitch had experienced a prior pyometra. Provided the bitch is stabilized prior to spaying the prognosis is good. Provided the above guide-lines are followed in choosing candidate animals prognosis for fertility in medically treated bitches is fair to good. If medical treatment fails, the bitch can still be spayed.

Linda Aronson, DVM



Lisa Danchuk (Auldscotia Bearded Collies) and Sydney aged 7

Sydney (Ch. Auldscotia Truly Madly Deeply HIC) was my hope at a fresh start - after a 10 year hiatus from breeding and showing, she was going to be the one to get me started again - I procrastinated and it was not until she was 5 years old that I bred her for the first time with hopefully 1 or 2 more litters to follow.

I watched her closely so that I'd catch the very beginning of her season. She was to be bred this time to produce her second litter. Her first litter could have been pulled straight from the textbooks. One natural breeding that lasted 32 minutes on day 14 of her season. I knew the time was right because I had done smears on her to determine her progress throughout her season. I calculated her due date; I kept her well fed, stress free, comfortable and happy. She was 5 years old at this time and I knew I had already waited longer than I should have to breed a maiden bitch. She blessed me with 7 healthy puppies 61 days later (one day earlier than I had calculated). 7 healthy puppies! I was ecstatic! It is easier for me to learn about things as I experience them, so I began to research just what exactly goes on with the female canine reproductive system in greater detail than I ever had before. What I learned at that time taught me that I should not expect a large litter - I figured I would be lucky to get perhaps 2 or 3 puppies, maybe 4 - but 7!!?? WOW. I'm not a vet; I'm not even a vet tech. I am first and foremost a lover of animals, and my Beardies hold a very special place in my heart.

Here is some of what I learned about the intact female canine reproductive system:

- 1. Progesterone is the hormone that is produced in the bitch to maintain a pregnancy to term. Progesterone is produced and maintained at that level in all intact bitches EVERY season whether they are pregnant or not. Progesterone wreaks havoc on the lining of the uterus and creates areas of scar tissue. It is impossible for fertilized eggs to implant themselves on scar tissue. (In healthy bitches, the uterus will return to normal 12 weeks after the season, only bitches with CEH have progressive damage. LA)
- 2. A bitch is born with all the eggs she will have for her entire lifetime, unlike a dog who can produce sperm throughout his life. Every season the bitch releases some of those eggs until her stores are depleted (I never did find



any reference to approximately what the numbers of eggs might be), and as she gets older she releases fewer eggs. (Bitches don't run out of eggs to mature each season, but produce fewer and may cycle less frequently with age. LA)

Knowing just these 2 things and given her age explains my surprise at 7 puppies. I'd like to add here that she delivered those 7 puppies without complications in 1 hour and 50 minutes (that includes a 55 minute break between puppy number 6 and 7!)

April 2nd, 2008 – 1st sign of colour.

Begin smears on April 8th - showing 100% cornified on April 9th.

1st progesterone test April 11th - < 0.6

2nd progesterone test April 14th - <0.6

3rd progesterone test April 17th – 2.9

Final progesterone test April 19th – 11.1.

We began breeding April 20^{th} – 35 minute natural tie, April 21^{st} - 8 minute outside tie, April 22^{nd} – 25 minute natural tie. We tried again on April 23^{rd} but Syd was no longer interested in him. Just as he was penetrating for the final tie, Syd cried out, then settled once they were tied. I thought nothing of it at the time other than Syd was being a prude.

On April 25th (a Friday) late in the evening my curiosity got the better of me and I laid her on her back to have a look at the appearance of her vulva, knowing that a swollen vulva at this point was a good sign. There was dark blood clotted around her vulva and I knew this was not normal for my girls. I made a couple of calls to friends who were also breeders to get their opinions and collectively we decided to watch her over the weekend and if the bloody discharge was still there on Monday I would take her into the vet. We all suspected a small tear in the vulva area that likely occurred on that 3rd and final tie, which was the cause of her crying out. Everything else about her appearance and behaviour was completely normal. Her colour was good, refill time appropriate. She was eating and drinking well, alert, temperature was normal (for one of my girls) at 100.6. Years ago I had read that a bitch's temperature into the first part of diestrus could stay slightly



low, so I began to observe my girls and noticed a correlation. It was quite normal for my girls to have temps in the high 99's and low 100's immediately following a season whether they had been bred or not. This is not something there is much information on, as there is usually no reason to take a temperature on a healthy animal. (Normal canine temperature is 99.5 -102.5 °F (37.5-39.2 °C). LA)

April 26th I had all 3 girls in the yard with me. Sydney and her nearly 2 year old daughter went for a tear about in the yard as they usually do – it didn't last long – I don't like to let them make much of a ruckus for fear of disturbing the neighbours. That evening, I put Sydney up on the table to brush her out. There was still some brownish red discharge, it was clear – not cloudy and there was no odour. All other signs were still normal. The bloody discharge began to turn a brighter red overnight and early on the morning of the 27th when we woke, Syd had left behind a stain on the bed where she was sleeping. I thought that if there was a tear that had began to heal, she re-opened it when she went for the run around the yard the evening before. Her temp at 5:30 am was 102.2 – still within the normal canine range, but I knew it was not normal for one of my girls following a season. For me, it was a possible indication of a fever.

I was scheduled to work that day and had no choice but to go in and get things started. I called a friend to come and sit with Syd while I was out, knowing I would return home by noon. I was not going to leave her for the day – I wanted to watch her closely. The bloody discharge was now bright red, like what you would see from a nose bleed. It was Sunday now and I was faced with having to take a (hopefully) pregnant bitch into an emergency clinic with a bloody discharge. Avoiding the emergency clinic had nothing to do with cost and everything to do with not knowing the vet I would be dealing with. If there was any way to get her safely through until Monday morning to see our own vet that was what I wanted to do. All other signs were still normal and by 11 am her temp had returned to 100.3. Perhaps the tip of the thermometer at 5:30 am had gotten into a ball of stool in her rectum - that would explain the higher temp, I told myself. I continued to monitor her temp every few hours for the rest of the day -1:30 pm - 99.8; 5:00 pm - 100.8; 8:00 pm - 100.9; 4:30 am Monday morning April 28th her temp still seemed normal at 101.0. There were no other signs that Sydney was in any type of distress at any time.



I called the vet clinic as soon as they opened and got Syd in to see the vet that afternoon. All her signs were normal – heart rate, colour, refill time, temperature, activity level, appetite and water intake. The vet checked her over, looked inside with 2 different speculums – no evidence of a tear or bruising. We opted to start her on a course of Clavamox 250 mg every 12 hours for 7 days – just in case. I requested a CBC to get a baseline in the event something developed later on. The vet agreed. She also wanted to run another progesterone test at this time to see where it was. Progesterone came back at 26.2 and CBC values all came back within the normal range.

Tuesday April 29th – Temp 10 am – 99.7; 4:30 pm – 99.7 Sydney's discharge today was a brighter red than it had been in the last day or so. I was still going with the theory that since all other signs were normal and her discharge, although alarming, was still clear and odourless, there must be the tiniest tear and the walls of the speculum hid it from the doctor's eyes. I justified it to myself that the tear (that I was so sure was there) had begun to heal and was once again disturbed by the speculum. The bleeding would slow as the day wore on I assured myself. I gave Syd's back end a much needed bath – being oh so careful how I aimed the flow of water so as not to allow anything to get near her vulva. I have always known that during and immediately after a season a bitch is a very sensitive to washing that area, but I felt so bad for her that she was not clean. I towelled her dry, had dinner and left for my weekly handling class. I returned home a few hours later, put Syd up on the table to finish drying her legs. There was more discharge and as I expected it was a darker brownish red than it was earlier. Still alarming, but the colour was darker, so the tear must have been rehealing, right?

I would like to mention here that all this while, I am trying to hide my worry and alarm from her. We are very much in tune, Syd and I, and ultimately that is what saved her life. Something else very important that deserves mentioning are the friends who listened to me day after day, hour upon hour, as I voiced my concern. Trying as best they could to calm my fears and simply be there for Syd and me. I know they were as exhausted as I was at the end of it all, and we are blessed to have such amazing people in our lives. I could not have maintained my sanity without them (and at times there wasn't much sanity).

I steadied myself from checking her April 30th. I was trying (and praying) to convince myself that I was over-reacting. I wanted this litter so bad that I



was worrying unnecessarily. If I wasn't careful, I was going to annoy and alienate my cherished friends and they were simply going to write me off as a Kook. I kept assuring them that one day they would see how normal I could be when a pregnancy was worry free (is there really such a thing?).

May 1st –11:30 am – temp 100.2 there is still blood, but considerably less and a darker brownish red. I breathed a sigh of relief; we are heading in the right direction I thought.

May 3rd – 9:00 pm – temp 99.8 dark discharge, clear, no odour, small amount. I am proud of myself for being able to resist checking her every few hours. Sydney is still happy, alert, her colour and refill time are still good. She is eating her usual amount, drinking well. I began to wonder now if perhaps I am seeing this discharge because Sydney has simply become lazy about cleaning herself. My girls are incredibly clean and often I see no signs when they are in season unless I physically check them. Maybe this is a normal amount of discharge and she isn't being as diligent about cleaning herself as she usually is. That must be it, I assure myself, as a matter of fact, I haven't really noticed her doing much cleaning lately, yes, that's the reason.

Monday May 5th – 11:30 am temp 101.5; 10 pm – 102.0. This morning was Sydney's last scheduled dose of her 7 day course of Clavamox. Until now I simply placed her pill on top of her meal and she eats it along with her food. All my girls do this, bless their hearts – I hate shoving pills down their throats. Syd turned her nose up at her food, I make sure she at least gets her pill and I do a little happy dance – this MUST be a good sign – she is refusing food – normal for a pregnant bitch. Syd is reluctant to take her dinner tonight also. As happy as I am that we are now getting positive signs, I don't like her to miss too much food; she is, after all, pregnant, right? We play a game and I begin to hand feed her. Syd eats most of her food. There is still evidence of some discharge on her back legs, but when I check her vulva for blood there is NOTHING! It is the cleanest I have seen it yet to this point in her pregnancy. I cried. I was so relieved that we seemed to be through the worst of this scare. Little did I realize at this point that the worst was yet to come.

Tuesday May 6th – I left work early today – I just wanted to come home and relax on the bed with my dog, relieved that things were starting to look up. 3:00 pm her temp is 101.9 – higher than I'm expecting, but there is very



little discharge at this point. Her bum bath from last Tuesday had not lasted and I opted to do it again, repeating last week's regimen. I was still being cautious to not get water or soap near her vulva but wanting her to feel clean. I finished towelling her and put her on the table to brush her back end. I noticed the tiniest bit of creamy, very light green tinged mucous at the tip of her vulva. My heart stopped. Surely I was imagining things. I continued to brush her legs getting more and more uneasy with each stroke and trying not to panic completely. Within moments there was a wee bit of watery blood and a slightly larger glob of whitish green mucous – still odourless.

This is NOT a good sign and I knew it. I called the vet. The receptionist was not at all co-operative; try as I might, I could not get across to her the urgency without completely losing my mind – remember, I was trying hard not to panic for Syd's sake. The vet I was familiar with could not see her today, and I did not know the other vets in the practice. There was no appointment available with my vet until Thursday late in the morning. I left a message for my vet to call me – I just needed her to know of the changes in Syd so she could decide the urgency. The receptionist told me, "I'll pass along the message, but I make no guarantees." I could not believe what I was hearing. I called back a few moments later to ask that they add my cell phone number to the message and she repeated again: "like I told you earlier, I can give her the message, but I make no guarantees." I know this vet, and I know she would call. I got the distinct impression from this girl that she had no intention of passing my message along.

At this point I was still hoping against all odds that this could somehow be fixed without jeopardizing Syd yet still saving this precious pregnancy. I continued to brush her and try to remain calm and keep things as normal as possible. I remembered my email group repro list where someone had posted the contact number recently for a phone consult with Dr. Hutchinson in Ohio – a very well known repro vet. I frantically sought out that post. I scribbled down the number and called. Dr. Hutchinson's secretary was not in the office that day, but would be in tomorrow at 8 am, I was welcome to call back then. What was I to do? I started trying to reason with myself – be logical, don't panic – there is only a small amount of discharge and aside from her not wanting her kibble (she will take rollover and other tasty morsels) she appears otherwise fine from every angle. There is no longer a bloody discharge.



I watch closely for the next couple hours, then put her in her crate and it's off to handling class again. My friends that have been helping us throughout this ordeal are both at class. I relay to them briefly what is going on and that I haven't heard from the vet as yet – still hopeful that she will call; she has kids and a life, and sometimes does not get a chance to call until the kids are in bed. One friend suggests I put in a call to Dr. Cathy Gartley – the repro specialist at the University of Guelph – my friend offers to call me with her number when she gets home from class. I get home, let Syd out of her crate to potty and she is wet down her back legs again – she begins to have a bowel movement and I grab for the flashlight instinctively to go check it out. It is a black, tarry blob about the size of a golfball.

I've seen this before – it is digested blood. Where was it coming from? Was that the reason her vulva looked so clean yesterday evening? Perhaps she passed a big bloody glob and cleaned it up – perhaps the little bits of creamy green I saw earlier were just residue from the big bloody glob. I tried to find the most logical explanation for this – all her vitals were still normal and she wasn't acting the least bit different aside from being very choosey about what she ate. She was still drinking normally, alert, happy, gums were pink and refill time was good. At 10 pm her temp was 100.7 At midnight I had finally calmed myself enough to try to get some sleep, although I knew I would only sleep with one eye closed this night, in case something changed with Syd – I slept in track pants and a sweatshirt so I could be ready should the need arise. I had placed a large, white blanket on the bed beside me, so that any discharge would be easy to see and take along with us to the vet if a trip became necessary. We slept, if you can call it that.

Wednesday May 7th – 5:30 am – temp 100.6 – Sydney is still refusing food, but all other outward signs are normal – she will eat hunks of rollover and cooked chicken, but wants nothing to do with kibble. Picky Pregnant Princess I tell myself, but deep down sensing something less positive. Her eyes look sad to me. I head off to work armed with phone numbers for 3 vets – Dr. Hutchinson in Ohio, Dr. Cathy Gartley at the U of Guelph and my own vet. I need to run this past at least one of them to either put my mind at ease or hit the panic button. It is pointless for me to ask anything of a vet I'm not familiar with and I know it. 8 am and I'm on the phone to Dr Hutchinson's receptionist. He does phone consults Thursday evenings – I put my name on the list. I call Dr. Gartley in Guelph – voicemail – I leave a detailed message asking her to call if she can help in any way. It's near 10 am now and I've heard nothing from my own vet – quite unusual – gut feeling still there that



the receptionist did not bother to get the message to her. I had to pull the ace out of my sleeve – Syd needed a vet, I needed a Valium (OK, I needed Syd to see the vet, or at the very least, I needed a vet to hear what was happening).

One of the friends I had been in contact with through this whole thing also uses the same vet I do and is very good friends with her. I call my friend in hopes that she can get in touch with my vet to let her know what's happening. Within 10 minutes I am on the phone with my vet – she wants to see Syd IMMEDIATELY. I leave work and head home to get Syd. En route I call another breeder friend and ask that she meet me at the vet's office. I know instinctively I am going to need 2 brains and 2 sets of ears to take in what the vet is going to tell me. I was right. The words a breeder never wants to hear – pyometra – the only option now is spay. Not possible, I tell myself, trying hard to maintain my composure. I ask the vet about the possibility of drug therapy – we have caught this early enough, haven't we?

She is not very hopeful about the outcome of drug therapy and is worried about it actually backfiring – successful treatment now only to have the bitch pyo again later. I tell her about my appointment for a phone consult with Dr. Hutchinson and explain who he is. It is now Wednesday afternoon 1pm - my phone consult is for Thursday evening between 5 & 7 pm – so many hours away. We decide to do an ultrasound to get a better look. It doesn't look good – the uterus appears to be much larger than it should be at this stage of the game. I have to make a decision and I have to make it soon. In one last ditch effort to save Syd's uterus (and still at this point unwilling to give up that she is pregnant and Dr. Hutchinson will have some kind of miracle treatment for us), I tell my vet if she is saying that Syd's life is in jeopardy right now in any way, I will have her spayed. If there is any way to get her through safely until tomorrow evening when I can speak with Dr. Hutchinson that is what I would like to try and do. No hesitation on her part - Syd's life is not in immediate danger; we can hold off and talk to Dr. Hutchinson. She wants to take vaginal swabs to run a culture and sensitivities, also Syd should go back on Clavamox and I request another CBC. I secure appointments for Syd for the following 3 mornings so that we can keep a close eye on her condition. Her temps throughout this day were: 1pm (at vet's office) - 102.7; 4:30 pm (at home) 100.5; 9:30 pm - 100.1



Thursday May 8^{th} – 7:30 am – temp 100.5. We have a 10:40 am appointment with the vet. I'm not taking any chances – if she feels anything has changed with Syd's condition I won't wait for the consult with Dr. Hutchinson and Syd will be spayed. Everything still looks OK to hold off until this evening, but come tomorrow morning we are taking action – drug therapy or spay – no ifs ands or buts! I have so many questions, how can it be pyometra so early on? Doesn't pyometra take a few weeks to brew and show up? She tells me she suspects this has been brewing for a while, possibly since the start of her season. I question the fact that if that were the case, are we running a risk of the stud dog being infected with anything as we did get 3 natural breedings – should we put him on preventative antibiotics? The answer to that, BTW, from 2 different vets (mine and the stud dog owner's both) was NO - very little chance that the male could contract any type of infection from this. I also confide to her at this time I'm not so convinced that the initial course of Clavamox did anything to hold any infection at bay (which was the original intent) as Syd went off her food before the Clavamox was done. We decided now that any hope of maintaining this pregnancy (if there even was one) is pointless. The vet suggests a Baytril injection right now and I agree. The best I can hope for is to be able to salvage the uterus providing Syd's safety is never jeopardized. 50mg Baytril administered IM will hold her for 24 hours. That will get us through the consult with Dr. Hutchinson and over to our appointment tomorrow morning – decision time.

It's now Thursday evening. I'm home with 2 of my closest breeder friends who have been through this entire ordeal with me, and are also great fans of Dr. Hutchinson. The third friend had another commitment and could not be present for the consult. I've got the speaker phone ready, notepads and pens and we wait. The phone rings and we are speaking with Dr. Hutchinson. What a nice man - so easy to talk to and absolutely full of information. We relay Sydney's information to him and begin to ask questions. He agrees it is likely pyometra, although he too feels it's quite early for it to present. He gives me hope and assures us all that Baytril is safe, even during pregnancy. He suggests maintaining her on the Baytril and Clavamox until we get the results of the Culture and Sensitivities back and to try to get her through to day 21 in order to determine if in fact we really do have a pregnancy here (we are now on day 17). He also tells us that prostaglandins are much safer to use than was once thought – he uses prostaglandins in his practice on bitches that are too sick for surgery. We talk for a while longer about other repro related things, ask him when he is



coming our way to give a seminar (I, personally, can't wait for THAT opportunity!) and then we say goodbye. Side-note for those that aren't familiar with the treatment of pyometra (from a layman's view, that is — I'm not a vet!): Baytril and prostaglandins are used — the Baytril to treat the infection and the prostaglandins to relax the cervix and contract the uterus to expel the pus. It can be very hard on the bitch and is absolutely NOT without risk to her life. Not a decision to be taken lightly.

After speaking with Dr. Hutchinson, my vet, several other breeder friends, listening to Syd tell me without words what she wanted, searching my heart and my soul and then approaching the entire thing from as logical a place as I could muster, I decided to go ahead with the spay surgery the next morning. It was like a blanket of serenity fell over me, and I was at peace. Even Syd seemed to relax. I knew this was the best decision for her, and that was ultimately the ONLY consideration.

The points we considered were these:

- #1. Syd's age: She was 7 years old not terribly old considering her breed and the longevity and vitality of my line. Her mother and grandmother had litters well past 7, but they were not Syd. This may have been a whole different story if Syd was perhaps 3 or 4 years old.
- #2. I was here trying to make the decision now of whether or not I could salvage Syd's uterus. Quite likely I could, but at great risk to Sydney, and if I did, what then? Breed her again on her next season absolutely! What if she has pyometra again and next time it is not an open-cervix pyometra like it is now, but a closed-cervix when NO signs are evident until it is almost too late then I'm looking at whether or not I can even save Syd not a place I want to be.
- #3. Forget about saving any pregnancy what effect will the poison in her uterus have on the whelps if we do manage to save them and get her to term? Will they make it to term and then just fade? Will they survive and just be sickly dogs for their entire lives? Will they even live a normal life expectancy if they don't appear sick? That was just not a road I was willing to go down.



Friday Morning – May 9th, 2008 – I take Sydney in for her 9:15 appointment at the vet. Syd, BTW, walks into the office still wagging her tail and jumping up to greet everyone in her path. I've already spoken with the vet this morning, long before the office opened. She wants to know what to do in the event that they open her up and find a normal, healthy uterus? Not likely, but possible. I tell her my decision has been made, they are to remove the uterus. I have one request, though. Can they save the uterus for me – I need to see it – I want to see what was in my girl. Of course they will, I'm told. Just before noon I get the call from the vet – Syd has come through the surgery very well; it was a pyometra, that uterus needed to come out.

** Aside from Syd's sad eyes, her refusal to eat, her discharge and the occasional rise in temp, she showed absolutely no signs of how sick she really was – EVER!!**

I waited for updates on her for the rest of the day to see how she was coming out of the anaesthetic and get word on when I could bring her home. Near closing time I arrived to pick her up. It was not until then that I actually saw the evidence of just what was going on inside of her – I saw her uterus. Suffice to say I was so relieved to know that it was no longer inside of her. Incredibly, the vet had had another bitch in for a pyometra-related spay and they saved that uterus for me as well, for reference and comparison. They had to cut into Syd's uterus to take a direct swab of the infection, thereby deflating it – they saved the second uterus to show me what Syd's actually looked like before they cut into it – unbelievable.

I have so many questions that I am searching out answers for. Some I am sure I will find; others I may never get. This entire experience has left me reconsidering how to go forward with my breeding programme. To the best of my understanding at this time, pyometra is a frightening and maddening condition that every intact bitch runs the risk of contracting. It is not something that can be predicted nor prevented. More than once I have asked if pyometra was caused by something I did or failed to do. Each time I have been answered with a resounding "NO". I truly wish it were something I had caused – I could take responsibility for it and take steps to ensure that this did not happen in the future.



The sense of loss that comes along following an emergency spay due to pyometra is indescribable — I had to make very difficult decisions without much time to examine my options and emotions were painfully raw. The finality of it all - Syd's uterus was gone - no more Syd Kyds and I vowed that although her uterus was lost, the lesson would not be and I would share our experience with anyone who may benefit from it. I am grateful to have come away from this experience with my darling, bubbly Syd and that I was blessed with a daughter from her to carry on. Count your Blessings.





Syd's deflated uterus





Uterus from 12 year old American Eskimo with pyometra, not deflated. (Above and below)





Diane Wynen (Madigan Bearded Collies) and Danni aged almost 8 years



(This was Danni's second live litter, born November 2008. She was bred in spring 2005 and conceived a singleton that was stillborn. She had a litter of 7 in 2006.)



Danni (Ch.Madigan's Strawberry Wine AGX AGXJ AADC SGDC) was an absolutely perfect, doting mom, until suddenly when the pups were 8 days old. Late that Thursday night she went in the box to nurse and proceeded to growl at a pup that walked towards her, and snapped at another. I also noticed she had stopped cleaning them because when I got them peeing they peed a flood! First thing in the morning I called the vet, because clearly something was wrong, though she was eating, active, and had no fever. She had developed a very tiny bit of pinkish discharge again after her post-whelping discharge had cleared up, but nothing that seemed concerning. We got an appointment for noon, and in the meantime I'd go in with her to nurse the pups and pretty much had to just hold her muzzle so she wouldn't stiffen and snap. She went in the box on her own and wasn't trying to leave,



and as long as the pups were towards her rear and nursing things were ok, it's just when some started coming towards the front teats, or worse – walked in front of her where she could see them. It was like she didn't recognize them as her pups, and was warning some interloper to get the hell away. Literally a day before I have pictures of her lying in the box with two puppies snoozing on her paw lying nestled next to her face, so it was sudden, dramatic, and worrying to say the least.

Off to the vet and some bloodwork. We waited there while they did it in house, and it showed significantly elevated WBCs, and a smear showed some pus cells. So the diagnosis was pyometra, obviously very early stages since no elevation of temperature or other usual signs (not lethargic, eating fine, no copious stinky discharge,) but enough to cause behavioral issues. We took her home again that afternoon to quickly nurse the pups, and then brought her back for the spay surgery. With 9 day old babies at home they said she could go home right after surgery, so the poor kid was literally just off the table at 6:30pm Friday and shortly after 7pm she was walking out with us and heading home, wobbly, groggy, and I'm sure still feeling pretty lousy. The pups of course were starving so we went straight up to the room - Danni was eager to go in, but took one look at the pups like "who are they and where are MY pups?" and climbed in the chair. I put one pup on her and she was growling pretty bad, but staying put, so I held her muzzle shut with one hand (thank god for Beardie muzzle hair!) and with the other hand rotated pups 2 x 2 until everyone had been fed. Then I went about getting everyone to pee. Fortunately they could poop on their own.

The next few times we went in, Danni went in the box on her own to nurse, but she was showing no interaction with them, and she was still stiffening and growling if a pup headed by or towards her where she could see it, or if one tried to climb on her, so I'd sit in the box with her holding her muzzle shut and scratching her, and once she was done I'd do the rounds getting everyone to pee. Danni was interested in licking the pee spots on the blankie and towel, but still not cleaning pups on her own. Saturday morning we went out and bought a soft muzzle, and that helped a lot. She would go in the box, I'd put it on, and at least then she could sniff the pups without me having to worry she would snap at them. I'd still sit in the box with her and she'd lie down with her head in my lap while they nursed, still with growls pretty regularly. She'd finish and leave the box and would go sit in the chair, so I'd stay in the room with her for a while just hoping being in that environment would help, because I couldn't leave her in there unsupervised.



Late Saturday she started licking a pup here or there through the muzzle, and showing some signs of her maternal instinct coming back; and when she went and sat in the chair she seemed interested when I was getting them to pee so I ended up holding one for her and she licked him up a storm. We then developed a routine - go in, muzzle on, feed the pups, then in to the chair, muzzle off, and one by one I'd hold the pups for her to get peeing. After a while if I wasn't fast enough I'd feel her paw on my shoulder like "helloooo, another puppy please."

Sunday there was much improvement (she went in first thing in the morning and was wagging at her puppies like, "There you are! Where have you been?!!!!"), and I only had to put the muzzle on once. I had to be very much on guard still watching her body language and listening for the sometimes almost imperceptible grumble which occurred once or twice, and frequently head off trouble if I saw a pup wandering towards her, which I knew might trigger a reaction. I didn't dare leave her in the room unsupervised still, just in case, so I had to note when the pups had been fed, for how long, and figure when they needed to be fed again. It was like hand-feeding but with a mama dog to provide the food. She started to ask to go in the room, which was a good sign. The nice thing too, I suppose, is that even at her worst, I never had to force her to do anything – if I went in the room she always followed me, and other than the night she was just home from surgery she went in the box on her own to nurse too. She was on antibiotics and Metacam for pain, and I found that the couple of times there was still an occasional growl it was later in the afternoon, which was just before her Metacam dose, so possibly she was feeling some pain again as the previous day's medication wore off.

As the days went on she continued to really do better and better, and she seemed to want to make up for those couple of days of not cleaning pups by almost CONSTANTLY cleaning them, while they're running around going "we're hungry would you sit down!!!!!"





The addendum to the story (since most of the above was written when they were just 3 weeks old) is that she continued to make up for the temporary maternal 'dip' by returning to being an absolutely perfect mom, completely attached to her kids, nursing them long past the age when she needed to, and having a blast playing with them and teaching them, and even now they're 12 weeks old she insists on being with them regularly and spends time cleaning them and otherwise doting on them (but still teaching them you don't steal toys from mom).

There was an added little hitch at 4 weeks when her incision opened up and she had to undergo another emergency surgery, but even after that she still demanded to be put in with the pups regularly and she ever so patiently stood and let them nurse. I suppose despite all the stress and worry we really have a lot to be grateful for, namely that the pyometra did show so early with behavioral changes, because it's quite possible if it hadn't she could have become a very sick girl in a very short period of time before we realized there was a problem, and potentially we could have ended up



worried about saving her life and having to hand feed the babies because she was toxic. So, while it wasn't something I want to ever go through again, I know it certainly could have been a lot worse! Danni and her puppies are all doing wonderfully.



