Sadie is a ten-year-old mixed breed dog, whose caretaker Jeannine writes in concerning a problem with her urination. It seems over the past few weeks, Sadie has begun to urinate more often and there has been blood in the urine, especially over the last few days.

I hope for Sadie's case the following discussion is mute because she has already seen her veterinarian for diagnosis and treatment, but of course that would not stop me from rendering an opinion.

We've discussed the urinary tract, its components and its function, in the past, so I will not go into too much detail today. From the description provided, it appears as if Sadie is having a problem with her urinary tract. It is possible the blood noted by Jeannine in Sadie's urine may be coming from somewhere else such as her reproductive tract depending on whether or not she has been spayed; however, for this discussion I am going to concentrate on the urinary tract and specifically the bladder.

Sadie is expressing irritation likely from her bladder, by increasing her frequency of urination. Jeannine does not mention an increase in urine production or an increase in Sadie's thirst, thus leading me to this conclusion. Irritation within the bladder can come from a few different problems that, at times, can be intertwined.

Bladder irritation from a bacterial infection is perhaps the most common diagnosis for this symptom. Bacteria can enter the bladder and set up shop, so to speak, from one of two directions. The more common of the two would be bacteria entering from the vulva and going up through the urethra (the tube leading from the bladder out of the body) into the bladder. The other method of entry would be via the blood stream from some infected source, the blood flowing through the kidneys carrying bacteria being filtered into the urine and sent down the ureters to the bladder. The source for this route of bladder infection is commonly dental disease.

With dental disease, bacteria at the gum line are entering the blood stream all the time. The body's line of defense, the immune system, is constantly trying to fend off these invaders and in some cases, fails. Once into the blood stream, these bacteria can infect many areas within the body including the heart liver and kidneys.

Another possible cause for irritation in the bladder leading to blood in the urine and increased urinary frequency often without increased production is stones in the bladder. As one might imagine, chunks of rock rolling around in your bladder might be a bit irritating and this friction can cause the bladder wall to bleed.

A third possibility, especially since Sadie is a bit older, would be a tumor growing in the bladder. These masses can grow and bleed, thus causing visible blood in the urine.

As I mentioned earlier, these conditions are not mutually exclusive. It is possible and in fact quite common, for a urinary tract infection to occur in the face of bladder stones or a tumor in the bladder. This makes it especially important to rule out an underlying problem in the bladder when there is evidence such as described.

Again, I hope Sadie has already seen her veterinarian and is well on her way to recovery, and if not, get her in as soon as possible.