

Dr. Larry Downes' thoughts on controlling Shar-Pei fever:

Shar-Pei fever syndrome is one manifestation of a larger disease that afflicts the Shar-Pei breed – namely, Shar-Pei Autoinflammatory Disorder (SPAID). Links to excellent review articles on this syndrome can be found on Drs. [Linda Tintle's](#) and [Jeff Vidi's](#) websites. Much of what I state below is taken from their very valuable research and writings.

Once a Shar-Pei is diagnosed with this tendency/syndrome, there are a couple of therapeutic options available:

1. Colchicine: Colchicine is the traditional drug used to hopefully limit the excessive deposition of amyloid in the body, a breakdown product resulting from chronic inflammation. Unfortunately, amyloid can accumulate in the liver, kidneys and intestines and ultimately lead to organ failure. About 70% of the time, in my experience, colchicine will slow or stop this process in Shar-Pei.

Also, in my experience, colchicine can decrease the frequency and severity of fever episodes in some dogs.

Side effects of colchicine are usually digestive – inappetence and/or diarrhea. (If a patient cannot tolerate a “full” dose of colchicine, I will try administering as much colchicine as the patient can tolerate, on the theory that some colchicine is better than none). Rarely, colchicine can cause bone marrow suppression. Ideally, lab work is run on treated Shar-Pei twice a year; not only to monitor for colchicine side effects but also to monitor for signs of progressive amyloidosis and other diseases. Many Shar-Pei respond well to this drug, and live full life spans. I *always* try colchicine first when managing my Shar-Pei patients with fever.

Currently in the United States, colchicine is available through only one manufacturer, and is very expensive. Much more reasonable cost options include obtaining colchicine through a compounding pharmacy, or through Canadian pharmacies.

2. Dipyrone is a drug that reliably will “break” a fever. It is usually injectable, and is given subcutaneously, often at home by owners. Alternatives included non steroidal anti inflammatory drugs (NSAIDS) – *these are contraindicated and must not be given concurrently with corticosteroids*. I strongly recommend owners at least contact us by phone, even after the fact, so we can make a decision if your dog needs to be seen, and so we can keep track of the frequency of the fevers.

3. Corticosteroids. There is a group of Shar-Pei afflicted with SPAID/Shar-Pei fever for whom colchicine is not tolerated and/or does not diminish the frequency or severity of fever episodes. In MY experience and opinion, low dose corticosteroids can often be an effective, usually safe means of either entirely stopping fevers, or dramatically decreasing the severity and frequency of fever episodes. Probably the mechanism involves corticosteroids somehow down regulating genes coding for the production of HAS2 (Hyaluronic Acid Synthase 2). These genes are apparently responsible for the production of hyaluronan, the building block of mucin. As mucin is ultimately broken down or metabolized, smaller fractions or fragments of hyaluronan are created that act as internal fever drivers, or *endogenous pyrogens*. (These endogenous pyrogens are part of the autoinflammatory process alluded to in the term SPAID – substances produced by the body, that the body reacts to in an inflammatory fashion.) Therefore, inactivated HAS2 regulating genes lead to decreased hyaluronan and mucin production, which in turn means less hyaluronan fractions/endogenous pyrogens, which means fewer fevers, which is great, right?

Yes, except corticosteroids themselves can cause side effects, which may include:

* “deflation” of the muzzle and general body, sometimes dramatically so.

* deleterious potential effects on the kidneys, liver and pancreas, which can lead to decreased kidney and liver function, diabetes mellitus, and pancreatitis. Often the development of these diseases is dose dependent, but *not all the time*.

* increased incidence of urinary tract infection.

* increase in thirst and urination, and possible muscle wasting, including the muscles of the heart (again, this is usually dose dependent).

So, in dogs who are candidates for corticosteroids I always have a cost/benefit discussion with the owners, in terms of risk of corticosteroids. Included in this discussion is a discussion of quality of life versus quantity of life. Some of these patients that have frequent, poorly controlled fevers are so miserable, that the owners readily trade a possible long term decrease in lifespan in order to have their dogs feel good right now. Having said that, we try to lower the dosage of corticosteroids to the minimal amount (often times, pretty low) to control the fevers while not having side effects (“having our cake and eating it too”).

I have found that the vast majority, but not all, dogs we place on corticosteroids for fever control seem to do well, often times for years. Indeed, my personal belief is that for most of these patients, the risk of a severe, and possibly fatal, event due to the fevers themselves is markedly higher than the risk of corticosteroid side effects.

4. Supplements/Complementary medicine: This is not my area of expertise, but I definitely feel supplements, both herbal and not (such as omega fatty acids or High Vitality), can be helpful in managing fevers in some patients.

I expect that in the future, this list will be added to and amended. For example, I have a few patients who are on an antiallergy drug called Apoquel (oclacitinib) that I suspect may be somewhat helpful with managing symptoms of fevers. I have also had a few Shar-Pei that still developed fevers while on Apoquel, so the jury currently is still out on this.

If you have more questions or concerns about your Pei and fevers, please let us know – we’re here to help!