

## Steroid-Responsive Meningitis-Arteritis (SRMA)

### What is SRMA?

Steroid-Responsive Meningitis-Arteritis (SRMA) is a condition characterized by an impaired immune system, leading to inflammation in the meninges and the blood vessels (arteries) of the spinal cord. The meninges are the delicate layers of tissue encasing the spinal cord. Inflammation of this tissue is referred to as meningitis. Inflammation of the spinal cord's arteries is arteritis. The immune system typically functions to safeguard the body against infections; however, in dogs with SRMA, the immune system begins to attack the normal lining of the spinal cord (the meninges).

### What are the Clinical Signs of SRMA?

Dogs with SRMA may exhibit various clinical symptoms. These symptoms can be intense neck pain, lethargy, fever, and challenges in walking. Some dogs may experience swollen and painful joints.

### What Causes SRMA?

The exact cause of SRMA remains unidentified; however, it is probably an immune-mediated or autoimmune disorder. There appears to be a genetic inclination towards the onset of SRMA, as certain breeds are frequently affected (Boxers, Beagles, Bernese Mountain Dogs). It is important to note that SRMA is not the result of an infection.

### Which Dogs are Prone to Developing SRMA?

SRMA is most frequently observed in young dogs, specifically those aged 2 years or younger. Some dogs may exhibit symptoms at an older age. Certain breeds are more predisposed to developing SRMA than others, such as Boxers, Beagles, Weimaraners, Pointer breeds, Bernese Mountain Dogs, and Nova Scotia Duck Tolling Retrievers.

### How is SRMA Diagnosed?

An MRI is advised to search for signs of inflamed meninges or to eliminate other potential causes of your dog's clinical symptoms. Typically, a spinal tap will be suggested to obtain spinal fluid for confirming the existence of inflammation. Most animals diagnosed with SRMA exhibit an elevated white blood cell count and protein concentration in their spinal fluid. In rare instances, some dogs with SRMA may present with a normal spinal fluid analysis; this is more common in animals that are already undergoing steroid treatment. If your dog is experiencing swollen or painful joints, a joint tap may also be conducted to assess the nature of the inflammation present in the joint fluid.

### How is SRMA Treated?

As SRMA is an immune system disorder, it is managed through medications aimed at suppressing the immune system's abnormal response. Reducing this abnormal response will contribute to lowering the inflammation in the meninges. Typically, the abnormal immune response is addressed with steroids such as Prednisone or Prednisolone. In cases where your dog's condition is severe or does not adequately respond to steroid treatment alone, we may need to incorporate other medications, such as Azathioprine, to further suppress the immune system.

**Prednisone**

Prednisone is a steroid that aids in suppressing the immune system. The side effects associated with this medication may include heightened appetite, increased thirst, frequent urination, and excessive panting. In some cases, Prednisone can lead to gastrointestinal ulcerations or bleeding. Initially, Prednisone is administered in high doses and is then gradually reduced over a period of at least six months. This gradual tapering of Prednisone is typically performed slowly to help avert a recurrence of the disease.

**What is the Prognosis for SRMA?**

The outlook for a full recovery is favorable with treatment. Dogs that are tapered off their medications too rapidly face an increased risk of SRMA recurrence; hence, treatment is recommended for a minimum duration of six months. Overall, the vast majority of dogs will experience a complete recovery and subsequently enjoy a great quality of life.