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An investigation of infectious etiologies of sporadic inclusion body myositis

Tyler Kennedy, Michele Meltzer MD

#### Introduction

Sporadic inclusion body myositis (sIBM) is a rare, debilitating disease that can significantly lower one's quality of life. Unfortunately, there are no current effective treatments, as the underlying causes are still unknown. We hypothesize that preceding infections do not cause sporadic inclusion body myositis.

#### **Methods**

The study investigated patients with a diagnosis of inclusion body myositis, with a concurrent or previously documented infection. Men represented a larger proportion of the population as they have an increased preponderance of those affected. The primary objective was to discern which infection, if any, could induce the inflammatory and degenerative changes in muscle tissue observed in patients with sporadic inclusion body myositis.

#### Results

A literature review on 42 primary articles, with HIV being the most studied infectious etiology (n=10). Those results support the notion that the inflammatory and degenerative changes seen in sporadic inclusion body myositis are not directly linked to a preceding infection. Although a causal relationship could not be established for any infection, many of them are being still actively investigated.

### **Discussion**

The observed results indicate that there are parallels between the inflammatory changes that take place in sIBM and certain infections. However, there are likely to be other causes that more directly lead to this disease manifestation. Future studies are warranted to further understand the inflammatory and degenerative pathways that take place subsequent to particular infections and inform us of some unknown causes and risk factors.