ABSTRACT

The expression of progerin, a mutated form of lamin A protein, is caused by autosomal dominant mutation in the LMNA gene. It is located in the nuclear lamina of the cells, and can affect the overall cell structure, especially in skeletal muscle cells (myocytes), in which central nucleation can occur. In order to detect the effects of progerin in the cells' morphology, there are several techniques that can be utilized, including IHC (immunohistochemistry) and H&E (hematoxylin and eosin). Due to this, this study used aforementioned techniques to detect and observe tissue samples as well as progerin expression in cells. Additionally, for the samples itself, one month progeric mouse tissue samples were utilized in this study.

Keywords: progerin, lamin A, skeletal muscle