

The location of heart melanocytes is specified and the level of pigmentation in the heart may correlate with coat color

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Abstract

Melanocytes are mainly found in the skin and more rarely in other parts of the body, including the heart. We analyzed the localization of heart melanocytes and their levels of pigmentation in a series of mutant mice presenting different numbers of melanocytes and pigmentation in the skin. We found that melanocytes were localized in the valves (mitral, tricuspid, and aortic) and septa (ventricular and atrial). Moreover, the numbers of melanocytes in the heart appears to reflect that of the skin. Mice having a high or low level of pigmented cells and/or melanin in valves and septa have similar lifespan. In this respect, melanocytes found in the valves and septa of the heart are probably not essential in a healthy and non-stressful environment.

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