Optimum Preparation of *Candida albicans* Cell Wall Extra (CAWE) for the Mouse Model of Kawasaki Disease

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Keywords

Kawasaki disease · Animal model · *Candida albicans*

Kawasaki disease is the most common acute systemic vasculitis of unknown etiology in children [1] and can cause inflammation of the coronary arteries leading to aneurysms. *Candida albicans* extract is one of the materials commonly used to induce coronary arteritis in a mouse model of Kawasaki disease [2, 3]. Here we report an optimized method for preparing *C. albicans* cell wall extra (CAWE).

1. 80% of the mice administered CAWE that had been alkalized at 87 °C showed massive inflammation around the origin of the coronary arteries. By contrast, the mice administered CAWE that had been alkalized at 97 °C showed no inflammation.
2. 60% of the mice administered CAWE adjusted to 640 µg protein/mouse died within 2 days whereas 100% of the mice administered CAWE adjusted to 320 µg protein/mouse exhibited inflammation but survived.

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In conclusion, high heat processing causes poor pathogenicity and high protein content causes excessive pathogenicity. Therefore, CAWE that has been heat processed at 87 °C and adjusted to 320 µg protein/mouse is optimal for the mouse model of Kawasaki disease.

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