Midterm results of aortic repair using a fabric neomedia and fibrin

glue for type A acute aortic dissection.

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Publication Date: 2007

Abstract:

BACKGROUND: Controversy exists concerning the optimal surgical treatment of acute type A aortic

dissection to reduce mortality rate and the need for reoperation. The goal of the present study was

to evaluate midterm results of repair using a fabric and fibrin glue for acute type A aortic dissection.

METHODS: From 1994 to 2005, 100 patients with acute type A aortic dissection underwent

supracommissural graft replacement using a fabric as "neomedia" and fibrin glue. Mean patient age

was 65.7 +/- 11.3 years.

RESULTS: Hospital mortality was 9%. All 91 survivors underwent follow-up evaluation for a mean

period of 47.7 months. Aortic regurgitation was restored to non or mild in 46 survivors who had

preoperative aortic regurgitation in the immediate period, and only one patient developed moderate

aortic regurgitation in the midterm period. Survival at 1, 5, and 10 years including hospital mortality

was 89.0 +/- 3.1%, 75.2 +/- 5.1%, and 59.2 +/- 10.9%, respectively. Reoperation for a ortic lesion

was performed without mortality in three patients (residual dissection, n = 1; sinus of Valsalva

dilatation, n = 1; acute redissection, n = 1). During two late reoperations, the fabric was observed to

be firmly adherent to the dissected wall and maintained the shape of the aorta. Freedom from aortic

reoperation was 98 +/- 2% and 98 +/- 2%, at 5 and 10 years, respectively.

CONCLUSIONS: Supracommissural aortic replacement using a fabric neomedia and fibrin glue

resulted in low early and late mortality as well as a low reoperation rate.