

#7 FATE OF THE ECTATIC INFRARENAL AORTA: EXPANSION RATES AND OUTCOMES.

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Purpose: The natural history of the ectatic infrarenal aorta defined as greater than one time and less than one and a half time the diameter of the adjacent normal aorta remains undetermined. While surveillance protocols have been proposed for true aneurysms, no recommendations are currently available for ectatic aortas. The purpose of this study is to define the natural history and recommend surveillance protocols for the infrarenal aorta 2.5-2.9 cm in diameter.

Methods: Screening of 12,500 yielded 223 patients with and an infrarenal abdominal aorta 2.5-2.9 cm in diameter at a university affiliated VA medical center. All patients were prospectively followed by ultrasound from August 1993 through October 2000 and expansion rates were calculated by comparing at least 2 studies. Multivariate analysis of risk factors classically associated with abdominal aortic aneurysms was performed.

Results: The mean follow up was 5.9 years (range: 1-7.4 years) and no patients were lost to follow up. The mortality was 3.6% and no death occurred secondary to a ruptured aneurysm. The overall expansion rate was 0.13 cm / year. The percentage of ectatic aortas that became truly aneurysmal (>3 cm) was 63%.

Size distribution among the ectatic aortas that progressed to a true aneurysm:

3-3.9cm	4-4.9 cm	≥ 5 cm
n= 106 /223 (47.5%)	n= 32/223 (14 %)	n=3/223 (1.3%)

Multivariate analysis did not identify any risk factors that could be associated with the development of an aortic aneurysm

Conclusion: Current data suggest that ectatic infrarenal aortas expand slowly, do not rupture, and rarely meet criteria for operative repair. No risk factor linked to the development of aneurysms was identified. Based on this study we recommend that patients with ectatic aortas have a repeat ultrasound 5 years after the initial study.