

#23 - RESULTS OF STENT GRAFTING FOR AAA AFTER SYSTEMATIC IMA/LUMBAR COIL EMBOLIZATION.

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Results of stent grafting for AAA after systematic IMA/Lumbar coil embolization.

Objective: To evaluate the results of our policy of systematic coil embolization of the inferior mesenteric artery (IMA) and/or lumbar arteries (LAs) prior to stent graft placement for abdominal aortic aneurysm (AAA).

Methods: Retrospective review of all patients undergoing AAA stent grafting over a 4 year period at one hospital. Results were analyzed using uni- and multi-variate analyses.

Results: 55 male patients with an average age of 71+/-8 years who underwent AAA endografting and pre-operative coiling were evaluated. The average follow-up was 15 +/-13 mos (range 1 to 41 mos). The IMA was either coiled or occluded in 26 cases. An average of 1.3+/-1.6 LAs per patients were coiled (range 0 to 6; none coiled in 26 cases). The most common reason for non-coiling was a technical inability to cannulate the vessel. There were no immediate or late complications from the coiling procedure. At last follow up, 14 AAAs showed no change in diameter, one increased by 2 mm, and the remainder (n=10) decreased by 7.5+/-6 mm in maximal diameter. Only five (9%) type 2 endoleaks were detected during follow up, two of which had neither their IMA nor LAs coiled. Three were associated with size increase. Four of these 5 cases were treated with additional coiling with good results. Endoleak occurrence or AAA shrinkage did not correlate with the number of LAs coiled preop (p=0.37). However, there was a trend for complete embolization to be correlated with decrease in sac size (p=0.06) as well as a trend toward IMA occlusion being associated with fewer endoleaks (p=0.11). There was no association with device type.

Conclusion: Coil embolization of the IMA and/or LAs prior to stent grafting can be safely accomplished in a large number of cases and is associated with a low incidence of type 2 endoleaks. We cannot at present demonstrate a benefit to embolization in terms of endoleak prevention. Further analysis of a larger number of cases is needed to elucidate which intervention (IMA alone vs IMA+LAs) might be of benefit.