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IMAGING AND DIAGNOSTIC TESTING

INCIDENTAL DETECTION OF MALIGNANCY AND OTHER NON-CARDIOVASCULAR ABNORMALITIES ON MULTISLICE COMPUTED TOMOGRAPHY IN PATIENTS WITH SEVERE AORTIC STENOSIS EVALUATED FOR TRANSCATHETER AORTIC VALVE IMPLANTATION

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Session Title: CT Coronary Calcium and Noncoronary CT Applications Abstract Category: CT Coronary Calcium and Noncoronary CT Applications Presentation Number: 1039-234

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Background: Transcatheter aortic valve implantation (TAVI) requires precise knowledge of anatomic vasculature and aortic valve by computed tomography (CT). Non-cardiovascular structures are also amenable to assessment by CT. This study aimed to investigate the prevalence of significant non-cardiac findings incidentally found by CT in patients (pts) evaluated for TAVI.

Methods: Of the 394 pts screened for TAVI, 259 (65.7%) had non-contrast CT of the chest and contrast CT of ilio-femoral anatomy. Significant non-cardiac findings were defined as those requiring immediate evaluation or intervention or additional clinical/radiological follow up. Non-cardiac findings known before CT scanning were not included

Results: Of the 259 pts, 105 (40.5%) were men. The mean age was 82.3±8.1 years. Their mean STS and logistic EuroSCORE were 11.7±6.0 and 38.2±22.1, respectively. New significant non-cardiovascular findings were found in 89 (34.3%). (Table) Insignificant non-cardiovascular findings were identified in 222 (85.7%). Fluid retention was noted by CT in 105 (40.5%). Important peripheral vascular disease findings resulted in the exclusion of 49 (19.1%) patients from TAVI. Aortic aneurysm was found in 10 (3.8%) and porcelain aorta in 19 (7.3%)

Conclusion: Malignancy and other non-cardiovascular abnormalities are often found in pts who undergo CT for evaluation for TAVI. These studies should be meticulously examined to ensure that important findings are not missed.

Overall significant abnormalities n (%)	89 (34.3)
Malignancy	11 (4 2)
lung	4(15)
Ovarian	1 (0.38)
liver metastasis unknown primary	1 (0.38)
Deperantia concer	1 (0.30)
	1 (0.30) 0 (0.77)
	2 (0.17)
	1 (0.38)
Lymphangitic carcinomatosis	1 (0.38)
Non-malignant significant abnormalities, n (%)	
Noncalcified pulmonary nodules	
4 mm - 1 cm	11 (4.2)
>1 cm	9 (3.4)
Hilar, mediastinal, or paratracheal lymphadenopathy >1 cm	13(5.01)
Retropritoneal or abdominal lymphadenopathy >1 cm	2 (0.7)
Thyroid nodule	5 (1.9)
Dense liver parenchyma (Amiodarone liver)	1 (0.38)
Splenomegaly	5 (1.9)
Common bile duct dilatation	
Adrenal mass >1 cm (high density)	((2.7)
	9 (5.8)
Hydronephrosis	
Severe	1 (0.38)
Moderate	2 (0.77)
Mild	6 (2.3)
Splenic infarct	1 (0.38)
Miscellaneous Extrapleural mass	2 (0 77)
Para renal soft tissue nodule	2 (0.11)