

HISTOMORPHOLOGICAL STUDY OF CORONARY ARTERY

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*SUMMARY &
CONCLUSION*

SUMMARY AND CONCLUSION

Coronary artery disease is one of the major cause of death in developing countries.

Failure to understand normal coronary anatomy and distinguish between normal and anomalous structures may lead to misinterpretations and disastrous complications during coronary interventions and heart surgery.

Present study was done in coronary arteries of 20 fresh cadaveric heart to see anomalies and variations both morphologically and histologically. We have also studied coronary angiogram of 50 patients for correlating anomalies and variations present in cadaveric heart.

In both cadavers and in patients, we found very low incidences of 2 ostia for LCA while in majority of cases the length of left trunk was normal, some cases of short and long left main trunk was also observed. There was no correlation found between the short left trunk and type of dominance. The type of division of left trunk was bifurcation in maximum no. of cases. Same findings were observed in patients.

We observed in most of the cases, the anterior interventricular artery were crossing the apex and this phenomenon was associated with right dominance .

In right coronary artery we found one ostia in most of the cases , few cases of two ostia were also seen (separate origin of conus artery). While in patients no such case of 2 ostia was found for RCA.

In our study right dominance was most frequent finding in cadavers and in patients both. Therefore on morphometric analysis of both cadaveric heart and in patients results are statistically similar

On histological study of cadaveric heart we found pathological changes (intimal thickening, calcification, intimal tear and intraluminal thrombus) in both coronary artery. The site of these all pathological changes were significantly involving the proximal segment of anterior interventricular artery as also seen in patients regarding the site of luminal narrowing . Therefore we can hypothesize that histological changes found in cadaveric heart may be the causes of luminal narrowing in patients.