# Anatomical variations of coronary sinus ostium and Thebesian valve

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The coronary sinus (CS) is the main cardiac vein and it has become a clinically important structure especially through its role in providing access for different cardiac procedures. The study was carried out on 100 randomly selected adult human cadaver hearts fixed in 10% formalin. The transverse and craniocaudal diameters of the coronary sinus ostium (CSO) were directly measured. The presence of the Thebesian valve was noted and the anatomical details of the valve were documented in each case in terms of the shape and extent of coverage of the CSO. Considerable variations in the diameter of the CSO were observed. The mean craniocaudal diameter of the CSO was $8.1\pm1.51$ mm, and the mean transverse diameter was $7.67\pm1.72$ mm. Heart specimens without Thebesian valve tended to have larger ostia. The mean craniocaudal diameter and the mean transverse diameter of the CSO were statistically larger in the specimens without Thebesian valves ($p=0.000$ and $p=0.001$, respectively). The Thebesian valves were observed in 86 hearts, and a wide variety of their morphology was seen. The majority of the Thebesian valves were semilunar in shape (74.42%). The extent to which the valve covered the ostium was variable, including remnant valves that covered <15% of the CSO (35%), and valves that were large and covered at least 75% of the CSO (22.09%). In 3 specimens the valve completely occluded the ostium.

## References

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Keywords ————————————————————————————————————

Thebesian valve; coronary sinus ostium; variations.