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Summary and Conclusions

AND CONCLUSION

110 hearts obtained from autopsies were studied. Cases comprised of deaths due to head injury, hemorrhagic shock, burns, asphyxia, poisoning, suspected myocardial infarction, pulmonary tuberculosis.

The coronary arteries were evaluated for grade of stenosis and the hearts were also examined for myocardial ischemic changes by using gross histochemical staining methods.

The incidence of stenosis of the coronary arteries was found to be more in males then females. There was a consistent tendency for increased severity of stenosis with increasing age. In all the cases the stenosis was due to atherosclerotic lesions. Some amount of calcification was always seen in lesions of grade 2 or more. Thrombus occluding the lumen was seen in only one case.

Ischemic changes were detected in 17 of the hearts (15.45%). It was found that with the increasing grade of the stenosis there was an increase in the incidence of myocardial ischemic changes as detected by the staining methods. The group in which ischemic changes of myocardium were detected had a higher mean extent of coronary artery stenosis compared with the group which did not reveal ischemic changes. The former group also had a significantly higher mean age, however no significant association for body weight and body mass index was found. Also subjects above age 50 were found to be thirteen times more frequently affected by myocardial ischemia than subjects below 50.

17 fresh myocardial infarctions were demonstrated, but in 13 of them it was not until after the staining was done. In these 13 cases ordinary macroscopic evaluation did not give rise to any suspicion of fresh infarct.

Many of the hearts which showed infarct belonged to elderly people suffering from high grades coronary stenosis. Many of them were in shock or terminal stages of head injury, which together with coronary stenosis must be presumed to cause a relative myocardial ischemia. Therefore the percentage of appearance of subendocardial infarctions is very high. No simple correlation between the site of stenosis in the coronaries and the location of the infarcts could be found.

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