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THE APPEARANCE OF OSSIFICATION CENTRES IN STERNUM-A DIMORPHIC STUDY IN NORTH INDIANS

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ABSTRACT

The state and pattern of ossification is a reliable guide for the determination of age. The timing of appearance and characteristics of ossification centres of sternum exhibit considerable variation on the basis of individuality, sex and race. The study aims to lay down a standard in North Indians on which we can rely to evaluate the ossification against the backdrop of known chronological age of the fetus. The study was conducted on 100 aborted North Indian fetuses of both sexes (male female ratio 1:1) aged between 3 months to full term. The appearance of centres of ossification was studied and the sterna were typed. There exists a female prevalence in appearance of centres of ossification. The ossification centre for manubrium appears with the centre for the 1st sternebra.

Double centres are frequent and there is a tendency of rise in frequency of double centres from above downwards(for the sternebrae). The incidence of Type I sterna was maximum amongst the fetuses (50%) followed by Type II (30%) and Type III sterna(20%). The morphological variation is a fundamental feature for proper maturation and ossification of sternum. The timing of appearance of ossification centres has medicolegal and clinical significance and explains the chronology of development of an individual.

KEYWORDS: Ossification, Variation, Sternum, Typing

