

The Epicristid or Middle Trigonid Crest Defined

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The epicristid or middle trigonid crest connects the protoconid and metaconid in the middle of the trigonid. The difference between the epicristid and the distal trigonid crest is illustrated below:



2prd* distal trigonid crest

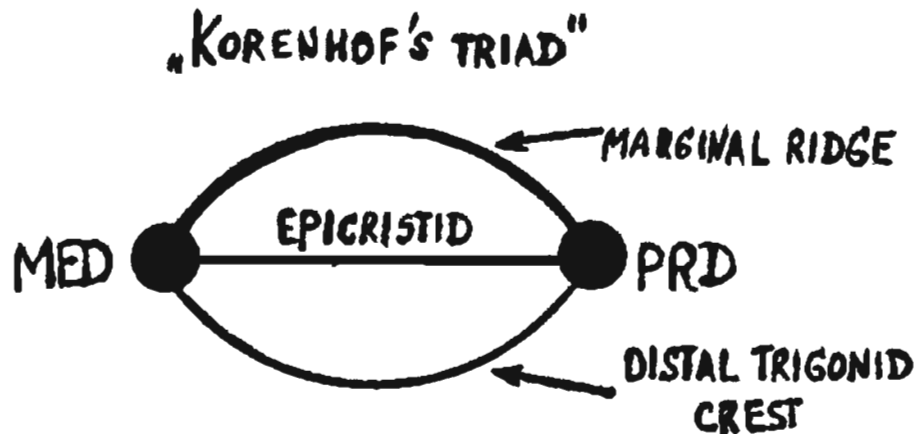
The distal crest is situated distally from furrow 2 prd.



2prd epicristid

The epicristid is situated mesially from furrow 2 prd.

Epicristid was described by C.A.W. Korenhof (1982) along with two other crests of the trigonid. Korenhof singled out: 1) marginal ridge, 2) middle ridge (crest), 3) distal ridge.



The term epicristid was introduced by the American Paleontologist Hershkovits (1971) who suggested a new, detailed classification of structures of mammalian teeth. Epicristid has been found in *Australopithecinae*, *Homo habilis*, *Homo erectus mauritanicus (africans)*, in European preneanderthal forms (Arago, Mauer) and in many European Neanderthal skulls (Le Moustier, Erinsdorf, Krapina, La Fate). No case was found in *Sinanthropus*.

This trait can be regarded as African. The distribution in modern populations is:

Africa (Mali, Ethiopia)	30-35 %
South Caucasoids (Caucasus, Middle Asia, India)	4-10%
Modern Mongoloids (series of Mongols and Touvinians)	0%
American Indians (Peru)	0%
American Indians (Pima series, Dahlberg Series, Arizona State University)	2 cases

The distribution of the epicristid is evidence for the African origin of modern Negroid populations, as well as the fact of a very deep root of this race in the African continent. (Succession can be traced back to *Homo erectus*.)

Epicrisis or Middle Trigonid Crest Defined (cont'd.)

*Editor's note: 2prd is the short form notation for one of Zubov's odontoglyphic features. 2prd means the second furrow on the protoconid. According to the system of odontoglyphics the mammalian cusp tends to be divided into three sections separated by furrows. These are second order furrows, since first order furrows separate the cusps from one another. On the protoconid furrow 2 is a second order furrow which is located more distally than furrow 1.

References

- Hershkovits P (1971) Basic crown patterns and cusp homologies of mammalian teeth. In AA Dahlberg (ed.): *Dental Morphology and Evolution*. Chicago: University of Chicago Press, pp. 95-149.
- Korenhof CAW (1982) Evolutionary trends of the inner enamel anatomy of deciduous molars from Sangiran (Java, Indonesia). In B Kurten (ed.): *Teeth: Form, Function, and Evolution*. New York: Columbia University Press.



Figure 1. A rare tricuspid upper first premolar in an adult dentition from the Chavez Pass site, Arizona. (Photograph by Diane Hawkey)