

A Short Note on Upper Lateral Incisor Tooth Crowding Among the Eskimos

BY LAWRENCE OSCHINSKY

In a previous paper by Dr. Roy Smithurst and the writer (1960) a specific kind of anterior tooth crowding among the Eskimos of the Eastern Canadian Arctic was designated as "in-standing lateral incisors". In other words the lateral maxillary incisors are displaced lingually in relation to the central incisors. It was also pointed out that hardly any other sort of anterior tooth crowding was noticed and that the instanding lateral incisors occurred in about 33% of a population of 2,000 Eskimos in an area extending from northern Quebec to north Baffin Island and the northern boundary of Hudson Bay. Moorrees (1957) noted that there was anterior crowding and rotation of teeth among the Aleuts but did not give any frequency table on the occurrence of the above mentioned specific lateral incisor displacement. He does, however, show a single example of in-standing lateral incisors in Figure 12 of his book "The Aleut Dentition".

This past summer, the writer discussed this problem with Dr. Robert Gessain who brought it to the writer's attention that he had published figures on this condition which also included irregularities of the canines as well. We quote below from his article (1959, p. 369).

... "Nous avons observé d'autres particularités de la partie antérieure des arcs mandibulaires et maxillaires. C'est la fré-

quence de l'irrégularité d'implantation de l'ensemble des incisives et la projection ou l'anteposition des canines.

Le tableau V donne la répartition de l'irrégularité d'implantation des canines et incisives.

Tableau V. — C. et I. irrégulièrement plantées. Ammassalimiut, 1934-35.

Age	Sexe	N.	% des sujets ayant une irrégularité d'implantation des canines et incisives
Adultes	H.	94	31
	F.	137	26
Enfants et adolescents	H.	89	34
	F.	94	42

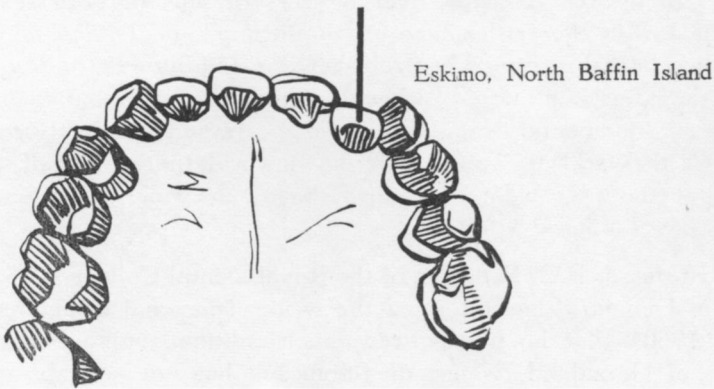
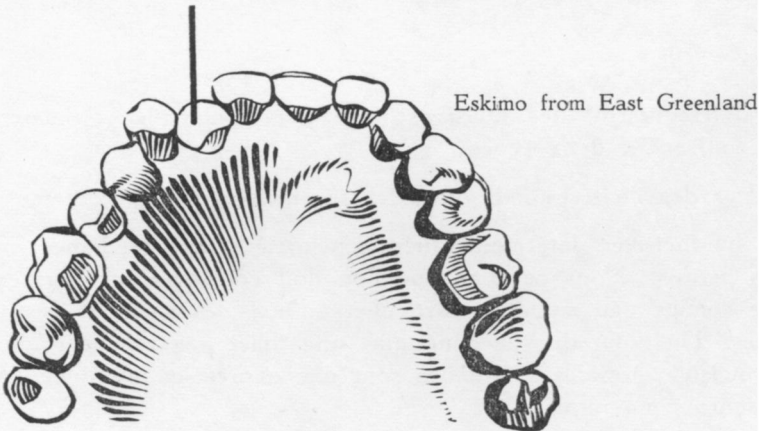
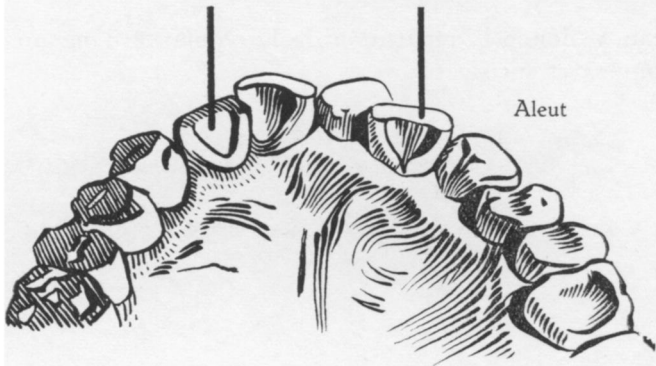
L'irrégularité des incisives nous paraît pouvoir se laisser schématiser en deux types:

- a) des incisives imbriquées et se chevauchant diversement;
- b) incisives latérales situées en arrière des médianes et plus petites. Nous pensons que l'on doit considérer ce dernier type comme une modalité particulière d'incisives latérales vestigiales. Du point de vue génétique, on admet généralement que les incisives latérales vestigiales sont une expression atténuée de l'absence congénitale d'1.2."

Thirty-three Eskimos, over 8 years of age, of both sexes, out of 147 in the settlement of Pangnirtung, or 22.4%, had in-standing lateral incisors. At Frobisher Bay 164 out 448, or 36.6%, had the same condition. Although the data of Gessain include other anterior dental irregularities and so are not completely comparable they still are valuable in showing a definite trend of this kind of tooth crowding among Eskimos in widely distributed areas.

Professor P.O. Pedersen of the Royal Dental College, Copenhagen, Denmark, has informed the writer (personal communication, 1960) that he has noticed this condition among his own series of Greenland Eskimo dentitions but has not yet tabulated

INSTANDING UPPER LATERAL INCISORS



the evidence. Dr. K. Hanihara, Department of Legal Medicine, Sapporo Medical College, Sapporo, Japan, has informed the writer (personal communication, 1960) that instanding lateral incisors occur between 5% and 10% of the Japanese. Dr. L. Altemus of the Department of Orthodontics, Howard University Dental School, Washington, D.C., (personal communication, 1960) has indicated that instanding lateral incisors are very rare among Negroes, and Professor W.M. Krogman of the Graduate School of Medicine, University of Pennsylvania, Philadelphia (personal communication, 1960), that instanding lateral incisors are also rare among North American Caucasoids.

It is interesting, that the distribution of the above mentioned condition is limited to the Eskimo area and Japan. It would be interesting and important to find out whether or not this condition occurs in other Mongoloid populations in Asia and the New World and whether or not it turns up anywhere else. For the present it seems it is rare in American Causasoids and American Negroes, but perhaps studies in Europe and Africa might bring forth other evidence.

It is too early to be able to state the causes of this condition and its anthropogeographical distribution, but it is probably connected with the phylogenetic reduction of alveolar prognathism characteristic of the Eskimo.

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