Lead Poisoning

Occupational lead poisoning usually follows inhalation of lead fumes or dust, while non-occupational intoxication is most commonly due to the ingestion of lead-containing paint by children. The characteristic manifestations of intoxication are alimentary colic, neuromuscular pareses principally affecting the extensor muscles of the arms, and anaemia with basophilic stippling of red blood cells. Acute poisoning also causes a severe encephalopathy, particularly in children.

*Oral Manifestations.*—Lead is deposited in the gums, causing pyorrhoea and a pathognomonic grey lead line at the gingival margin (Fig. 1).

*Ocular Lesions.*—Extra-ocular muscle palsies, optic atrophy, and cortical blindness occur in both acute and chronic intoxication, while in acute encephalopathy there is an associated papilloedema.

Gingival Hyperplasia induced by Epanutin (Diphenylhydantoin)

Epanutin is an anti-convulsant drug used in the control of all convulsive states except petit mal.

*Oral Manifestations.*—A conspicuous, although minor, side-effect of prolonged epanutin therapy is marked, painless, gingival hyperplasia (Fig. 2).

*Ocular Lesions.*—Epanutin may cause nystagmus, and rarely diplopia and ptosis, but the importance of recognizing gingival hyperplasia is in the diagnosis of those conditions where ocular pathology is associated with a chronic convulsive state, conditions such as tuberous sclerosis, congenital toxoplasmosis, and the Sturge-Weber syndrome.
Carcinoma of the Maxillary Antrum

By infiltrating beyond the boundaries of the antrum, this malignant neoplasm may cause both ocular and oral symptoms.

_Oral Manifestations._—Dental pain is often an early symptom and maxillary teeth become loose and may fall out. At a later stage the neoplasm may fungate into the mouth by infiltrating the alveolus around the roots of the teeth (Fig. 3).

_Ocular Lesions._—Unilateral epiphora due to malignant infiltration of the naso- lacrimal duct is an important presenting or early symptom in some cases. When the neoplasm invades the orbit it may cause proptosis, usually with upward displacement of the globe, extra-ocular muscle palsies, and optic atrophy.

Osteitis Deformans (Paget's Disease of Bone)

This chronic disease of the adult skeleton is characterized by localized excessive bone formation and destruction, resulting in skeletal weakness and abnormal architecture. The characteristic deformities are enlargement of the skull, kyphosis, and bowing of the tibiae.

_Oral Manifestations._—Alveolar hyperplasia may occur early in the disease and be very marked, causing increased separation of the teeth and mal-occlusion (Fig. 4).

_Ocular Lesions._—Proptosis, extra-ocular muscle palsies, and optic atrophy result from encroachment of new bone into the orbit, superior orbital fissure, and optic canal. Angioid streaks commonly occur, while the large pulse pressure resulting from increased vascularity of bone causes visible retinal artery pulsation.

Illustrations:

ST BARTHOLOMEW'S HOSPITAL, LONDON, E.C.1. (Figs 1 and 3).
GUY'S HOSPITAL, LONDON, S.E.1. (Figs 2 and 4).

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