

Pigmentation of the Oral Mucosa

The colour of oral mucosa depends on the epithelial thickness, keratin status, vascularity, density of the underlying fibrous tissue/hard tissue, melanin production and deposition of haemoglobin, haemosiderin or other extrinsic products.

Normal: Pinkish (for anglo saxon) and purplish/ brown for others

White: Epithelial hyperplasia/dysplasia, hyperkeratosis

Red: Atrophic epithelium, epithelial dysplasia, vessels dilatation, Kaposi sarcoma

Black: Melanotic macules, melanocytic naevus, melanoma

Yellow: adipose tissue, sebaceous glands

Blue: Mucocele

The main causes of oral pigmented lesions

Red Lesions	White Lesions	Pigmented Lesions
Inflammatory	Leukoedema	Melanin
Reactive	Local causes	– Racial
Erosive	Inherited (White sponge naevus)	– Melanotic macules
Atrophic	Leukoplakia	– Melanocytic naevus
Purpura	Neoplasm	– Malignant Melanoma
Vascular	Infections	– Peutz-Jeghers syndrome
Neoplasm	Mucocutaneous disease	– Addison disease
		Exogenous pigments
		– Metal
		– Graphite/ink
		– Bacteria
		– Drugs
		– Plant derivatives



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column

oral medicine

Diagnosis and Management

1. Diagnosis of oral pigmentation is by a complete medical and dental history, and clinical examination. Vascular lesions will blanch on pressure.
2. Location, size, symptoms, number, colour, timeline or ABCED criteria: asymmetry, irregular borders, colour variegation, diameter greater than 6mm, and evolution or surface elevation.
3. Management usually by clinical review, photographs and measuring tools. Occasionally a radiograph may indicate the presence of an amalgam tattoo and can be diagnostic.
4. Biopsy for large or new pigmented lesions and those with irregular colouration or borders.



Physiological pigmentation



Amalgam tattoo



Lymphoepithelial cyst



Haemangioma



Melanotic macule



Chronic inflammation induced pigmentation