27 - Colour deficits

Colour deficits

© SPMM Course 9. Agnosias Visual agnosia o Visual object agnosia refers to a failure of object recognition despite adequate perception. o Patients with apperceptive visual agnosia have normal vision, but cannot identify and name objects. But these subjects have preserved semantic representation of the object, as evidenced by their ability to name objects in description or touch. This is seen in patients with bilateral occipitotemporal infarction. o In associative visual agnosia, the stored semantic knowledge is affected. Lesions of the anterior left temporal lobe are often seen. o To test for visual agnosia, it is important to assess visual object naming/description and tactile naming, naming described objects, and providing semantic information about unnamed items. Prosopagnosia The ability to recognise familiar faces is affected in prosopagnosia. But clues such as voice, gait, etc. can aid identification. The deficit is often not just restricted to faces; fine-grained identification within categories may also be impaired (e.g. types of fruits and flowers). The underlying semantic knowledge associated with a particular person is not disrupted; so when asked to describe the facial features of a named person, the patient can usually describe this well. Face processing is a bilateral function; more key areas may be present on the right hemisphere. Acquired prosopagnosia is usually associated with bilateral or right-sided lesions of the occipital

- temporal junction (FUSIFORM GYRUS). In rare cases of prosopagnosia after left-sided lesions in left-handed subjects, it is attributed to a reversed hemispheric specialization for face processing.

Colour deficits

Achromatopsia Colour agnosia Colour anomia Loss of ability to discriminate colours. (Often associated with pure alexia) Loss of the ability to retrieve colour information stored in semantic knowledge base (E.g. ‘‘What colour is a banana?’’) Disorder of colour naming despite intact perception and colour knowledge (‘‘What colour is this?’’) Medial occipitotemporal damage due to left posterior cerebral artery infarction Left occipito-temporal damage Disconnection of the language structures in the temporal lobe from the visual cortex

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