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**PROSOPAGNOSIA (FACE BLINDNESS) IN NEUROLOGICAL DISORDERS**

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The term prosopagnosia also known as face blindness was coined in 1947 by Bodamer J. It's a cognitive disorder of face perception in which the ability to recognize the familiar faces, including ones own face while other aspects of visual processing such as object discrimination and intellectual function decision making remains intact. The prosopagnosia prevalence can approach 2.5% of the population There are two types of prosopagnosia according to etiology. The first type is congenital / developmental prosopagnosia which refers to the deficit in face processing that is apparent from early childhood in the absence of any underlying neurological basis and in the presence of intact sensory and intellectual function. The second one is acquired prosopagnosia after non-degenerative disease (stroke, head injury) or neurodegenerative diseases in older people.Variants of prosopagnosia include an apperceptive variant (deficits in facial structure perception) and amnestic or associative variant (unable to remember faces even though they can perceive them the perceptual information can not access facial memories because of a disconnection or loss of them) (McNeil JE, Warrington EK.,1993). The prosopagnosia pathophysiology is still not completely understood. The frequency of prosopagnosia in various neurological diseases has not been definitively established.

A search of literary sources (scientific articles, clinical guidelines) was conducted, including those published in peer-reviewed journals indexed in Pubmed, Scopus databases on the problem of prosopagnosia.

With increasing usage of head MRI scans there have been many published case reports and few small case series studies of patients with brain lesions and prosopagnosia (De Renzi E, et al.1994). Prosopagnosia has been linked to involvement of the fusiform gyri, mainly in the right hemisphere.

The recent large complex study included 336 patients with probable or definite prosopagnosia who were examined with 18 F] fluorodeoxyglucose-PET and MRI of the right and left frontal, temporal, parietal and occipital lobes (K.A Josephs , K. A Josephs, 2024). They showed that only 10 (2,98%) had developmental prosopagnosia, which was observed predominantly in men(80%). Of the 326 with acquired prosopagnosia, 235 (72.1%) were categorized as degenerative, 91 (27.9%) as non-degenerative. Among the cases with acquired prosopagnosia the degenerative diseases were predominant (231/72,1%). The most common degenerative diagnoses were posterior cortical atrophy, primary prosopagnosia syndrome, Alzheimer's disease and semantic dementia, with each diagnosis accounting for >10%. The most common non degenerative diseases (27.9%) included stroke, epilepsy, primary brain tumours. In rare cases prosopagnosia may be resolved or improved with time (in migraine-related prosopagnosia, posterior reversible encephalopathy syndrome, delirium, hypoxic encephalopathy and ichemic infracts).

On [18F] fluorodeoxyglucose-PET, the temporal lobes proved to be the most frequently affected regions as in the patients with degenerative and non-degenerative prosopagnosia. MRI revealed the right temporal and right occipital lobes as most affected by a focal lesion. The most common pathological findings in those with degenerative prosopagnosia were frontotemporal lobar degeneration with hippocampal sclerosis and mixed Alzheimer's and Lewy body disease pathology.

In this large case series of patients diagnosed with prosopagnosia they observed that facial recognition loss occurs across a wide range of acquired degenerative and non-degenerative neurological disorders. The right temporal and occipital lobes, and connecting fusiform gyrus were the key areas in prosopagnosia. Continued research and increased awareness are essential to improve the diagnosis of prosopagnosia and the treatment of the underlying conditions