

Higher visual function

＊Lecturer: Prof. Kyoko Suzuki



[Department of Clinical Neuroscience, Yamagata University Graduate School of Medicine]

＊Date: December 12th (**FRI**), 2014 from **18:00**.

＊通常の開催曜日、時間、場所とは
異なりますのでご注意ください。

This seminar schedule and place has been
changed from original. Please be careful.

＊Place: **Lecture Room 3**, Medical Education & Library Building **4F**.

＊講師：鈴木 匡子 先生 [山形大学大学院医学系研究科 高次脳機能障害学・教授]

＊日時：平成 26 年 12 月 12 日 (**金**) **18:00**

＊場所：医学教育図書棟 **4 階 第 3 講義室**



Vision is not a simple passive process but an active one that gives us the necessary information to behave appropriately. Visual attention modulates what we attend to because we cannot process everything at a time. Brain damaged patients with impaired attention demonstrate variety of symptoms, which enable us to clarify qualitative features of human visual attention and its neuronal bases.

Simultanagnosia, inability to perceive more than one object simultaneously, is a marked example of impaired visual attention, which is one of three symptoms of Bálint's syndrome. Patient with simultanagnosia cannot notice two triangles at the same time even when they are overlapped in the same visual field. The object he attends to may change from time to time and the extension of "an object" also changes depending on the context. The size of the object does not affect the ability to perceive an item.

Simultanagnosia results from bilateral occipitoparietal lesions, most often with multiple strokes. More rarely, simultanagnosia is reported in patients with posterior cortical atrophy, most of whom are eventually diagnosed as Alzheimer's disease. Some patients with simultanagnosia behave differently from a patient with classical Bálint's syndrome who collides with objects in a room like a blind person. They can walk around without touching objects. The more a patient concentrates on an object, the smaller the effective visual field becomes. It is the reduced effective field of vision depending on the task demand that is playing a significant role in simultanagnosia.

Various factors, such as visual attention, affect higher visual functions. It is important to conceive of vision as a dynamic process in order to disentangle complex visual symptoms.

＊Inviter: Prof. Manabu Ikeda (Department of Neuropsychiatry)

担当：池田 学 教授（神経精神医学分野）

＊Essay/レポート提出先：miked@kumamoto-u.ac.jp

＊Essay(CC:Student Affairs Section／医学教務)：iyg-igaku@jimu.kumamoto-u.ac.jp