Smart Cyber Operating Theatre (SCOT) As Truly "Information Integrated OR" - The First Install Of Basic Type To Hiroshima University Hospital -

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According to the development of surgical instruments and systems including vital monitor, neurophysiological monitor, navigation, microscope, endoscope, CUSA, electric cautery, ultrasound, intra-operative MRI and so on, many kinds of machines and equipment are in OR. Usually they are so-called "stand alone" condition. Additionally, they have their own machine language and time system to deal their work. We, doctors have to recognize each data from each machine to evaluate the meaning of each data and combined condition.

SCOT is so-called information integrated operation room. In this new system, we use some middle wear, interface to collect all data in one platform and make new interface to inform all staffs in the OR to share. To recognize all data at a glance, these data are output into one large 4K monitor.

Visualization of all data in one monitor make us to understand on-going state of operation. In April 2016, we installed basic SCOT in Hiroshima University Hospital. During these 2 years, almost 30 cases were treated using SCOT. Two thirds are glioma cases, one third is intractable epilepsy cases and the rest is skeletal tumors. We will introduce our SCOT and inform the concept and on-going state in the lecture