MedGadget's MedTech Monday: Brain surgery, now through the eye socket

Mass Device

Brain Surgery: now through the eye socket **[1]:** Physicians at Johns Hopkins Hospital are operating on the brain through a tiny incision in one of the eyelids instead of lifting a large piece of the skull in the continuing effort to make surgery less invasive. The procedure, named transpalpebral orbitofrontal craniotomy, allows for access to the middle and front regions of the brain. The cranial cavity is reached through a hole created by removing a small, half-inch to one-inch-square section of skull bone right above the eyebrow. Doctors may then perform endoscopic surgery with help of previously obtained CT and MRI image data. Afterwards, surgeons close the dural defect with a graft and place the removed bone section back in its original position. The procedure is shorter, less invasive and has fewer complications than conventional surgery. The resulting scar is hardly visible because doctors make the incision in a natural crease of the eyelid. In surguries so far, doctors performed repair of persistent cerebrospinal fluid leaks and pneumocephalus, and biopsy and resection of midline brain tumors in a total of seven patients. [1]

WolframAlpha imports WHO data **[2]:** WolframAlpha announced they integrated worldwide data from the World Health Organization into their dataset. Now users can look up immunization rates, hospital beds and other indicators, and use the search engine to perform relatively complex comparisons. WolframAlpha has been beefing up its medical database since its launch late in 2009. [2]

TissuePatchThoracic seals lung leaks **[3]:** There is now a new intraop tool to deal with the bubbles in water seal chambers of chest tubes. Leeds, U.K.-based tissuemed unveiled the TissuePatchThoracic patch for fixing air leaks during lung surgery. The company introduced the patch at this year's annual meeting of the

European Society of Thoracic Surgeons. The new offering is undergoing clinical trials to assess its effectiveness in sealing airleaks. [3]

Plastic antibody effictive against real antigen **[4]:** Researchers from UC Irvine, Stanford, and Japan's University of Shizuoka have successfully tested the first plastic antibody. The tiny device is an artificial antitoxin. Doctors injected the plastic antibody into laboratory mice to target melittin, the toxin found in bee venom.

[4]

A weekly roundup of new developments in medical technology, by MedGadget.com *[5].*

SOURCE [6]

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