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Case Report **Published Date:-2018-12-31 00:00:00**

[A Three approach at one stage to surgical management of Cervical Spondyloptosis after Failed Primary anterior fusion](#)

A 35-year-old female, known case of complete spinal cord injury, presented with cervical pain and neck deformity that interfere with her physiotherapy and occupational therapy. Two years before admission, she had a car accident which result in a complete quadriplegia. That time at another center, she underwent surgery to anterior cervical fixation of C6-C7 through insertion of cage and plate without corpectomy. Based on current radiologic images, spondyloptosis was detected at the C6-C7 with bilateral locked facet, due to hardware failure. A three approaches in one stage was performed to maintain cervical alignment that includes posterior, anterior and again posterior approach. With this manner, anterior fusion through corpectomy and insertion of expandable cage and plate as same as instrumental posterolateral fusion were done. After surgery, she was pain free and the alignment of cervical spine was maintained so she could come back to ordinary rehabilitation programs.

Research Article **Published Date:-2018-12-14 00:00:00**

[Endogenous archeological sciences: Physiology, Neuroscience, Biochemistry, Immunology, Pharmacology, Oncology and Genetics as instrument for a new field of investigation? Modern global aspects for a new discipline](#)

In this work is analyzed scientific literature involved in human evolution to be used as an archeological Pathway to link different sciences in an overall new discipline.

A rational classification of single evidence make possible to better understand under new light some Physiological process.

The archeological instrument to be applied in other field like biology or other sciences.

Case Report **Published Date:-2018-11-30 00:00:00**

[Cranioplasty with preoperatively customized Polymethyl-methacrylate by using 3-Dimensional Printed Polyethylene Terephthalate Glycol Mold](#)

Cranioplasty is a reconstructive procedure for the repair of skull defects or deformities. Polymethyl-methacrylate (PMMA) is a commonly used alloplastic material when autologous bone is unavailable. However, manual shaping of bone cement for frontal and orbital bone defects is challenging and may not lead to cosmetically satisfactory results. Advances in computer-aided 3-dimensional (3D) design and printing technology allow the production of patient-customized implants with improved cosmetic and functional results. A 39-year-old female patient presented with right-sided frontal swelling and headache. Computerized tomography (CT) demonstrated a right frontal calvarial mass extending to the orbital wall. The boundaries of the lesion were marked using a 3D design software. A polyethylene terephthalate glycol (PETG) mold was manufactured with help of a 3D printer. Artificial bone flap was formed by pouring PMMA into the mold. After surgical resection of the calvarial mass, customized PMMA implant was applied with titanium mini plate and screws. The defect was closed properly with good aesthetic results. Production of customized PMMA cranioplasty implants with 3D printed molds is a useful technique and can be preferred for calvarial defects due to skull tumors, bone resorption and traumatic bone loss.

Review Article **Published Date:-2018-11-28 00:00:00**

The growth of Rehabilitation, in all of its field and mainly in neuro-rehabilitation applications and settings, is showing increasingly strong interaction with the growth of technology and its innovative applications.

Nevertheless, it should be stressed that the use of machinery has always been a fundamental mainstay of Rehabilitation practices facing the whole person's aspects and involving the whole physical world around the disabled people as it is: as it was in the past with physical exercises, physical modalities, and in many other trainings and activities that employed physical and technological means as Aids, Prostheses and Orthotics.

Review Article **Published Date:-2018-10-05 00:00:00**

[Vigour of CRISPR/Cas9 Gene Editing in Alzheimer's Disease](#)

Ailment repairing regimens has turned out to be arduous, despite a plenty of understanding and knowledge acquired in the past relating to the molecular underpinnings of Alzheimer's disease (AD). Umpteen clinical experiments targeting the fabrication and accumulation have been turned fruitless to fit potency standards. The tests aiming beta-amyloid hypothesis also turned futile making it exigent for further handling tactics. The new emanation of a comparably candid, economical, and punctilious system known as gene editing have showed light in path of cure for AD by CRISPR/Cas9 gene editing. Being a straight approach this procedure has already shown assurance in other neurological disorders too such as Huntington's disease. This review standpoint the immanent service of CRISPR/Cas9 as a remedial option for AD by aiming on specific genes inclusive of those that induce early-onset AD, as well as those that are substantial risk components for late-onset AD such as the apolipoprotein E4 (APOE4) gene.

Review Article **Published Date:-2018-08-14 00:00:00**

[Neurobiology of Common Sleep Disorders](#)

Sleep disorders in human are common and detrimental to general health of all age groups. While the neurobiological mechanisms of sleep disorders are not yet fully understood, recent advances in research on the sleep-wake regulation mechanism, genetic and epigenetic factors, cognitive, emotional and physiological changes related to sleep have shed light on the mechanistic basis of sleep disorders. Over the past two decades, studies in *Drosophila* have yielded new insights into basic questions regarding sleep function and regulation. More recently, powerful genetic approaches in the fly have been applied toward studying primary human sleep disorders and other disorders associated with dysregulated sleep. In this review, we discussed recent advances in neurobiology of sleep-wave cycle and common sleep disorders. Understanding these mechanisms are important in the diagnosis, treatment and prevention of these common disorders.

Case Report **Published Date:-2018-07-27 00:00:00**

[Herpes simplex virus \(HSV\)-1 encephalitis can induce chronic anti-N-methyl-D-aspartate receptor \(NMDAR\) encephalitis](#)

Herpes simplex virus (HSV)-1 encephalitis is the most common infectious cause of sporadic encephalitis. Despite treatment with acyclovir, HSV encephalitis is still associated with severe morbidity characterized by persistent neurological deficits. HSV encephalitis usually follows a monophasic course, however, some patients might develop relapsing symptoms caused by the formation of auto-antibodies directed against the N-methyl-D-aspartate receptor (NMDAR). Here we present an 82-year-old male patient with HSV encephalitis who developed shortly after his hospital discharge a Post-HSV NMDAR encephalitis, characterized by recurrent epileptic seizures and deterioration of his residual aphasia. First-line immunotherapy with intravenous immunoglobulins (IgIV) was administered and the patient returned almost to his baseline residual deficits of HSV encephalitis. Subsequently, he presented with recurrent relapses of NMDAR encephalitis. Since periodic treatment with IgIV has been started the patient is seizure-free and his neuropsychiatric condition is stable. In conclusion, the recognition of Post-HSV NMDAR encephalitis is very important because neurological manifestations can markedly improve with immunotherapy. Interestingly, in some patients cerebral HSV infection seems to trigger a chronic inflammatory disorder with persistent autoimmune activation which requires chronic treatment.
