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## Possible implications of a shunt surgery on a blind child's academic and spatial orientations skills - A case report

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In various cases of visual impairments, the individuals are referred to expert Ophthalmologists in order to establish a correct diagnosis. Children with visual-impairments confront various challenging experiences in life since early childhood throughout lifespan. In some cases, blind infants, especially due to congenital hydrocephalus, suffer from high intra-cranial pressure and, consequently, go through a ventriculo-peritoneal shunt surgery in order to limit the neurological symptoms or decrease the cognitive impairments. In this article, a detailed description of numerous crucial implications of the V/P shunt surgery, through the right posterior-inferior parieto-temporal cortex, on the observed preliminary capabilities that are pre-requisites for the acquisition of literacy skills in Braille, basic Math competencies, Braille printing which suggest Gerstmann syndrome in the blind is given. In addition, significant difficulties orientation and mobility skills using the Cane, in general organizational skills and social interactions were observed. The primary conclusion of this report focuses on raising awareness among neuro-surgeons towards the need for alternative intracranial routes for V/P shunt implantation in blind infants that preserve the right posterior-inferior parieto-temporal cortex that is hypothesized to modulate the tactual-spatial cues in Braille discrimination. A second conclusion targets educators and therapists that address the acquired dysfunctions in blind individuals due to V/P shunt surgeries.

### Biography

Waleed E Jarjoura studied Occupational Therapy at Tel-Aviv University (BSc), and later in The Hebrew University (MSc), while the Doctoral studies in University of Haifa (PhD). He worked in various rehabilitation institutes and hospitals such as HADASA-Jerusalem and Alyn Pediatric Hospital for Rehabilitation, Jerusalem. In parallel, he also worked at the School for the Blind in Nazareth, Israel, since 1998. Since 2013, he was assigned as The Head of Occupational-Therapy Department at the Arab-American University in Palestine. His specialization is in the rehabilitation of the blind, in general, and interested in the process of acquisition of Braille code for tactile reading in young, totally-blind poor-Braille readers.

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