Diencephalic syndrome is a rare disorder caused by a tumor that is usually located in the diencephalon, a portion of the brain just above the brainstem. The diencephalon includes the hypothalamus and the thalamus. Affected infants and young children may develop symptoms that include the failure to gain weight and grow as would be expected based upon age and gender (failure to thrive) and abnormal progressive thinness and weakness (emaciation). Affected infants and children may behave in an alert, happy and outgoing manner, which is in contrast to their outward appearance. Additional symptoms such as vomiting, vision abnormalities, headaches, and pallor can also develop. Diencephalic syndrome can progress to cause severe, life-threatening complications. Diencephalic syndrome is treated by surgery, radiation, chemotherapy and/or molecular-targeted therapy. The reason for the development of the tumor that causes diencephalic syndrome is unknown. Diencephalic syndrome was first described in the medical literature in 1951 by Dr. Russell. Diencephalic syndrome is an extremely rare disorder that affects both males and females. The incidence and prevalence of this disorder in the general population is unknown. The disorder is most often seen in infants or young children, but has also been reported in older children and adults.