BIMANUAL SYNKINESIS

Mirror Hand Movement

Involuntary movements on one side of the body mirroring voluntary movements on the other.

♀ Symptom  ♂ Male & Female

About Bimanual synkinesis

Bimanual dyskinesias is referred to as mirror movement that are involuntary symmetrical movements of one side of the body that mirror voluntary movements of the other side. The affected individuals unable to perform independent actions with the two hands or to perform purely unimanual movements. They usually have hand clumsiness and pain in the upper limbs during sustained manual activities.

This most affects the top half of the body but can also affect the bottom half. Walking may become more difficult, as one leg will move at the same time as the other. Playing a musical instrument such as the piano may become very difficult, as the process involves doing different things with each hand.

In humans, execution of unimanual movements requires lateralized activation of the primary motor cortex, which then transmits the motor command to the contralateral hand. Loss of this lateralization results in mirror movements. Congenital mirror movement disorder (CMM) is a rare genetic disorder transmitted in autosomal dominant manner in which mirror movements are the only clinical abnormality.

Bimanual synkinesis be associated with several diseases including:

Kallmann syndrome

Kallmann syndrome (KS), a combination of congenital hypogonadotropic hypogonadism (gonadotropin-releasing hormone (GnRH) deficiency) and decreased/absent sense of smell, results from disturbed intrauterine migration of GnRH neurons from the olfactory placode to the hypothalamus. Patients with KS usually lack puberty, but the reproductive phenotype (structural, developmental, or functional anomaly of the reproductive organs) may vary from severe hypogonadism (cryptorchidism or micropenis in male infants) to reversal of hypogonadotropism later in life. Associated phenotypic features include a feature called bimanual synkinesis.

Find more about related issues

Diagnoses

Kallmann syndrome
A genetic condition where the primary symptom is a failure to start puberty or a failure to fully complete puberty.
Learn more at: www.fertilitypedia.org/therapy/diag/kallmann-syndrome

Sources

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