Triple X syndrome


Overview

Triple X syndrome, also called trisomy X or 47,XXX, is a genetic disorder that affects about 1 in 1,000 females. Females normally have two X chromosomes in all cells — one X chromosome from each parent. In triple X syndrome, a female has three X chromosomes.

Many girls and women with triple X syndrome don't experience symptoms or have only mild symptoms. In others, symptoms may be more apparent — possibly including developmental delays and learning disabilities. Seizures and kidney abnormalities occur in a small number of girls and women with triple X syndrome.

Symptoms

Signs and symptoms can vary greatly among girls and women with triple X syndrome. Many experience no noticeable effects or have only mild symptoms.

Being taller than average height is the most typical physical feature. Most females with triple X syndrome experience normal sexual development and have the ability to become pregnant. Some girls and women with triple X syndrome have intelligence in the normal range, but possibly slightly lower when compared with siblings. Others may have intellectual disabilities and sometimes may have behavioral problems.

Occasionally significant symptoms may occur. If signs and symptoms are present, they are often variable. Signs and symptoms in girls and women with triple X syndrome may include an increased risk of:

- Delayed development of speech and language skills, as well as motor skills, such as sitting up and walking
- Learning disabilities, such as difficulty with reading (dyslexia), understanding or math
- Behavioral problems, such as attention-deficit/hyperactivity disorder (ADHD) or symptoms of autism spectrum disorder
- Psychological problems, such as anxiety and depression
- Problems with fine and gross motor skills, memory, judgment and information processing

Sometimes triple X syndrome may be associated with these signs and symptoms:

- Vertical folds of skin that cover the inner corners of the eyes (epicanthal folds)
- Widely spaced eyes
- Abnormally curved pinky fingers
- Flat feet
- Abnormally shaped breastbone
- Weak muscle tone (hypotonia)
- Seizures
- Kidney abnormalities
- Premature ovarian failure or ovary abnormalities
- Developmental delays