

Developmental Disorders in Infants/Toddlers and How They Differ From that of a Normal Child

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Fetal Alcohol Syndrome

- What is it?
 - growth, mental, and physical problems that may occur in a baby when a mother drinks alcohol during pregnancy.



How Does Alcohol have an Effect on Infants?

- Whatever you eat or drink during your pregnancy the baby eats and drinks.
- As the baby continues to develop over the 9 month period of pregnancy, the alcohol interferes with the babies' ability to get enough oxygen and nourishment for normal cell development in the brain and other body organisms.
- If one consumes excessive amounts of alcohol, the child will have problems in his/her youth.



Fetal Alcohol Syndrome: Cognitive Development

- Effect on Central Nervous System
 - Dysfunctions in:
 - Intelligence
 - Activity and attention
 - Learning and memory
 - Language and motor abilities
 - Behavior

Development: Infants

- Can find:
 - Increased motor activity
 - Hearing disorders
 - Eye abnormalities
 - Alterations in motor tone
- Infant death can occur
- Mental Retardation is possible
- Poor coordination and behavioral problems



Development: Early Childhood



- Delayed motor and speech development
- Decreased cognitive abilities
- Difficulties with interpersonal relationship skills
- Attention deficits, hyperactivity, impulsive behaviors
- Specific learning impairments in language and number processing as they get older

- Hearing and speech abnormalities
- Olfactory difficulties (sense of smell)
- IQ varies, ranging from 50 to 115

If the child has delayed development and significant functional problems in 3 or more of these important area, the child may need to be tested for FAS.

- Thinking
- Speech
- Movement
- Social Skill

All of these involve delays from what is expected at the child's age. For example, a 7-month-old cannot be considered delayed for not being able to say mommy.

Social/Emotional Development

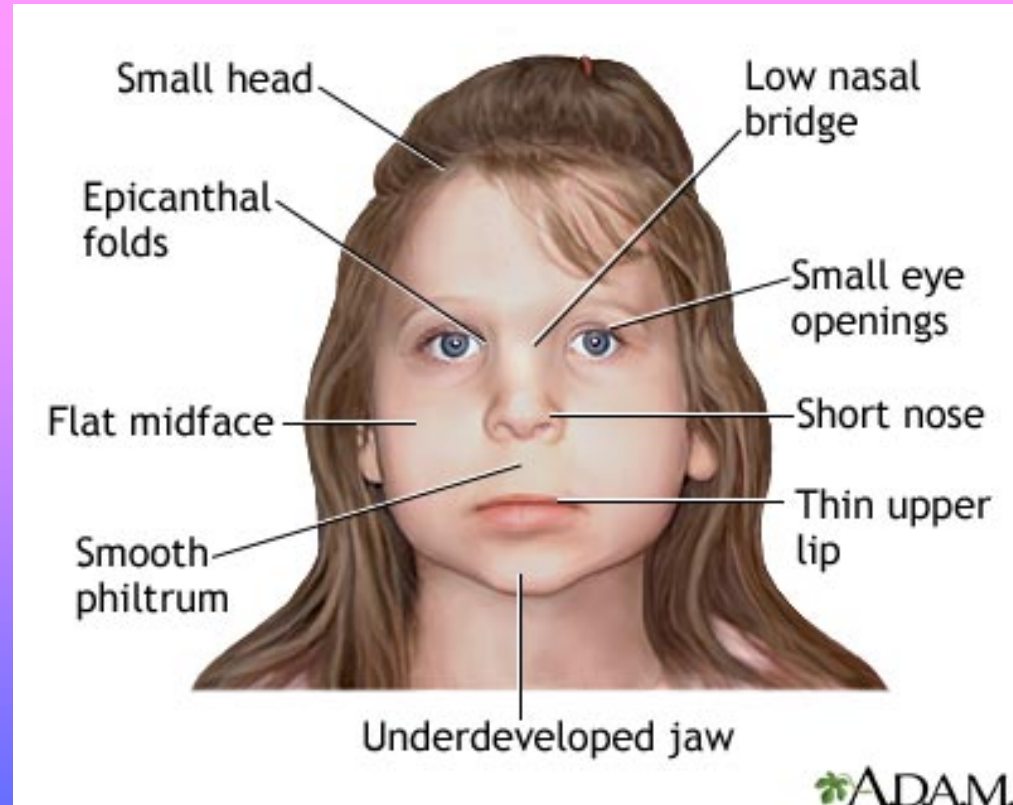
- Common symptoms for children with FAS
 - Attention deficits
 - Memory deficits
 - Hyperactivity
 - Difficulty with abstract concepts
 - Inability to manage money
 - Poor problem-solving skills
 - Difficulty learning from consequences
 - Immature social behavior
- Inappropriately friendly to strangers
- Lack of control over emotions
- Poor impulse control
- Poor judgment

Children can have FAE, in which many of these symptoms occur but the physiological characteristics do not.

Physical Features

*Skin of the upper eyelid -- from the nose to the inner side of the eyebrow -- that covers the inner corner of the eye.

*Absent or elongated groove between the upper lip and nose.



These features develop and continue to show as a fetus, through infancy, and toddlerhood.

Physical Growth of the Body

- Smaller for their age.
- The growth deficits affect height, weight, and head circumference and remain significant through age 10.
- Most likely will have at least two of the visible facial abnormalities.
- Prenatal exposure of alcohol and growth deficits are linear= the greater the prenatal exposure, the more effect on postnatal growth.



Physical Changes

Features may change with age.

- As a child grows older and reaches puberty, growth deficits are offset because of growth spurt, changes in facial length, and maturation.
- Growth features become less apparent after puberty and Fetal Alcohol Syndrome is more difficult to diagnose in adolescents or adults.



*Note: This does not change the fact that they are still diagnosed with this disorder.

Cognitive Differences

- Fetal Alcohol Syndrome

1. Attention deficits and hyperactivity.
2. Delayed motor and speech development.
3. Specific learning impairments in language and number processing.

- Average Child

1. Begin to understand object permanence and experiment with physical world.
2. Information-processing speed increases.
3. Language develops rapidly through babbling, holophrases, and telegraphic speech.

Social/Emotional Differences

- Fetal Alcohol Syndrome

1. Lack of control over emotions.
2. Immature social behavior.
3. Difficulty learning from consequences.
4. Inappropriately friendly with strangers.

- Average Child

1. Facial expressions appear to reflect emotions.
2. Development a style of attachment to others.
3. Toddlers begin to feel empathy.

Physical Differences

- Fetal Alcohol Syndrome

1. Height, weight, and head circumference are below the 10th percentile for their age.
2. Hearing abnormalities.
3. May learn to sit up, crawl, or walk later than a normal child.



- Average Child

1. Rapid height and weight gains.
2. Hear a wide range of frequencies.
3. Vision is 20/20 by 6 months.
4. Wiggle, push upward, sit up, crawl, and eventually walk.



Conclusion

- Even though children with Fetal Alcohol Syndrome may be behind in many ways compared to that of a normal child, they still act like every infant or toddler. They are still children and they want to explore the world and the fascinations in it!
- <http://www.youtube.com/watch?v=VphySaHa-fU&feature=related>

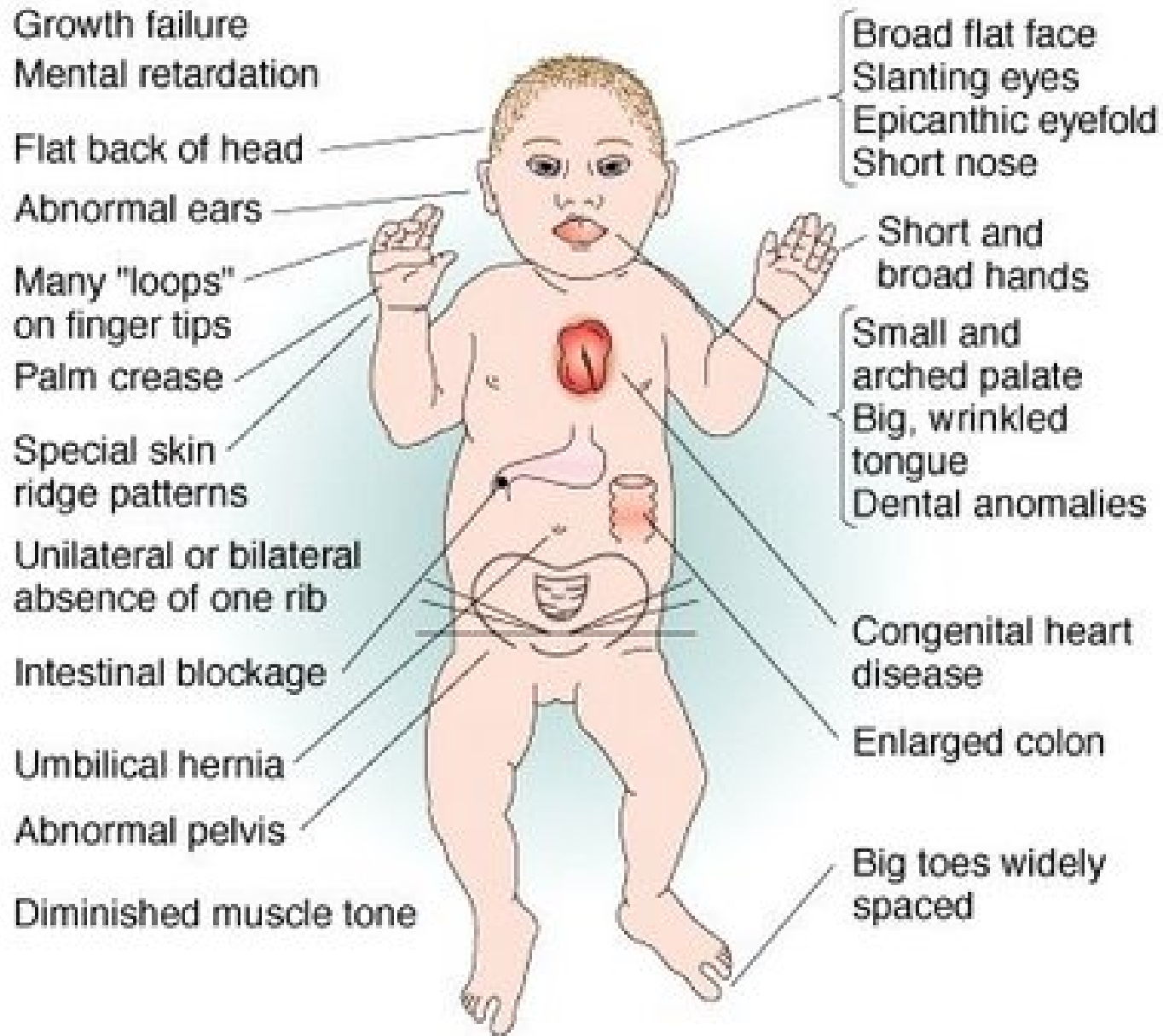
Down Syndrome

- Down Syndrome is a chromosomal abnormality that occurs in 1.3 per 1,000 births
- Occurs on the 21st chromosome and is often referred to as “Trisomy 21”
- An error in cell development results in 47 chromosomes, rather than the usual 46
- The extra gene material slightly changes the orderly development of the body and brain
- http://www.youtube.com/watch?v=-_P4t2jR1g



Physical Developments

- Kids with Down Syndrome tend to share similar facial features including:
 - Flat facial profile
 - Eyes slanted upward
 - Small ears
 - Protruding tongue
- At birth, they are born average size, but they tend to grow at a slower rate than their peers
- Low muscle tone can contribute to being “floppy”
 - They are able to reach developmental milestones such as sitting up, crawling, and walking; but are later than their peers



(a)

Physical Developments Continued

- Children with down syndrome still develop normally, but they develop at a slower rate than do average infants
- Children with Down Syndrome are able to do just as much as any other child if they put their minds to it
 - They can play sports and do a lot of other types of activities
 - They require more guidance and attention to fulfill daily activities
 - “Motor development is the next concern as babies' first motor skills, the ability to reach, grasp and hold, are important for beginning to explore their physical world and sitting, rolling, crawling and walking enable babies' to explore on their own. Delays in fine and gross motor skills therefore influence cognitive and language development, as they reduce the opportunity to explore and to move around to socialize.”

Cognitive Development

- Cognitive development is a term used by psychologists and teachers to cover all the skills involved in learning and mental processing, i.e. thinking, reasoning, remembering and learning skills.
- Toddlers will have delays in speech as well as in their ability to learn
- Most have mild to moderate intellectual impairments
- They are capable of developing skills throughout their lives, they just reach them at a different pace
- This is why you should never compare their development to an average developing child

Cognitive Development Continued

- Children need structured activities
- Early intervention is key
- Often need speech therapy to help develop their language skills
- In order to keep their attention they need to be engaged during activities
- If it is an activity they do enjoy, they will concentrate for longer periods of time
- Down Syndrome children can learn the same material as other children just at a slower rate

Emotional/Social Developments

- In the first year of life, social development (smiling, cooing, babbling and socializing) is usually only slightly delayed
- Within the first months of life babies with Down syndrome are usually much like other babies in their social behaviors and early communication skills. They are responsive and enjoy social interactions with their parents and caregivers
- Children with Down syndrome often do display more difficult behaviors than typically developing children, but less difficult behaviors than other children with similar levels of learning difficulty - perhaps reflecting their ability to understand non-verbal social and emotional cues.

References

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