

SHOESTRING BABY SYNDROME

Within the past few years we have begun to see correlation between low birth weight in infants and school learning problems these children have later on. Babies with certain birth statistics fit the category called the Post Maturity Syndrome (late developing syndrome), also called the Shoestring Baby Syndrome. Babies who are 19 inches or longer but weigh 7½ pounds or less tend to fit this category. The lower the birth weight, the higher the probability that the child will not be ready neurologically for school learning on schedule. The more difference between birth length and weight, the more likely the child is to have academic problems the first several years of school. For example, a baby 20 inches long weighing 6 pounds, 11 ounces, or a baby 21 inches long weighing 6 pounds, 5 ounces is almost certain not to be ready for school by Age 7.

The problem seems to be delayed development of the myelin structure of the central nervous system. This is commonly seen in premature infants with very low birth weight. A similar delay in myelinization seems to occur in Shoestring Babies. For unknown reasons, the myelin sheathing surrounding the nerve tissues stops developing, or fails to develop fully as it should in early childhood. This leaves the central nervous system unable to process information smoothly. The four sensory pathways that are essential for school learning do not connect (integrate) properly. It is very difficult for Shoestring Babies to connect sight, hearing, touch, and speech. What they see often does not connect or integrate with what they hear, touch, or say. What they hear often does not integrate with what they see or touch. This makes it very difficult for them to follow oral instructions, keep up with classroom discussions, understand what adults mean in oral explanations, get the meaning of friendly jokes or teasing, follow the lyrics of songs or poetry, and so forth. It also makes it difficult for them to answer questions quickly and accurately. The child's computer does not retrieve information smoothly. When the child reaches into his/her memory for math facts, definitions, science facts, letter/sound associations, or spelling patterns, he/she cannot find that specific information quickly enough to keep up with the pace of class work. Once the information is retrieved, the child starts to lose part of the pattern. Bits and pieces of the information may become mixed up with similar but different details. The child's memory systems do not deliver or hold onto academic information as adults expect. It is similar to a computer with a hundred short circuits that interfere with data processing. The Shoestring Baby has "short circuits" in the memory systems.

Many Shoestring Babies also have other physical problems that tend to disappear in time as the body reaches full maturity. Most Shoestring Babies have colic during infancy. This is usually due to lactose intolerance (inability to digest milk). Certain enzymes are not yet present in the digestive tract, leaving the baby unable to handle normal baby foods. Gradually these enzymes develop and colic symptoms disappear. Shoestring Babies also tend to have respiratory allergies. They tend to have a lot of ear infections and bronchial problems during early childhood. Many of these children need tubes in the ears (myringotomy) to help them get through this period of heavy allergies.

Several areas of physical development are often late in Shoestring Babies. Tooth development is often behind schedule. These children tend to lose baby teeth late. A majority of Shoestring Baby boys do not shed their front baby teeth until Age 7

with the top front permanent teeth not emerging until Age 8 or later. Puberty is also late for a lot of these children. It is not unusual for a Shoestring Boy to be Age 14 or older before first body hair appears and adolescent growth begins. These boys continue to develop physically into their early 20's, often not starting to shave until Age 18 or later. It is not unusual for them to grow another inch or two in height after Age 20. They are almost always late developing social skills. Most Shoestring Boys do not become comfortable dating until their early adult years. During school years they are mostly "immature," having trouble fitting into usual teen-age life and activities.

Fortunately the central nervous system finally reaches full maturity in most Shoestring Babies. Two breakthrough plateaus are seen in a majority of these students. About Age 16 the child rather suddenly finds school work less difficult. Attention span increases and frustration decreases, as a rule. If no other learning disability is involved, Age 16 finds most Shoestring Babies spelling better, learning grammar better, reading with better comprehension, doing better math, and understanding oral instructions more effectively. This lets them finish high school with relatively less struggle and greater success. Another developmental milestone occurs in the mid-20's, in most cases. Most Shoestring Babies find college or adult study becoming easier about Age 23 to 25. Most of them discover their college grades improving, and many go on to graduate school to the surprise of their elementary and middle school teachers. It is not unusual for a Shoestring Baby to become a successful professional with an earned doctorate. It is a matter of nature needing several more years than normal to achieve full maturation of the central nervous system.