

For premature babies, epigenetics maybe link to high cholesterol later in life

It has been said that cardiovascular problems such as high blood pressure and elevated lipids have a beginning in childhood, or even earlier, in the womb. One author uses the analogy of a dynamite stick with a long fuse: the fuse gets lit once a baby is born, but the explosion takes place many years later.

In an upcoming edition of *Pediatrics*, a study done in Finland at the University of Oulu looked at the cardiovascular risk factors in adolescents who were born preterm. It is already known that adolescents and adults born before 34 weeks gestation (early preterm) have higher blood pressures and an altered glucose metabolism compared with their term-born peers. What prompted the authors to do their research is that it is unknown if the same risk factors apply to babies born less preterm, between 34 and 36 weeks.

Scandinavian countries are well-respected for their ability to do long-term epidemiological research. Their medical system allows for close followup of their populations — often from cradle to grave. In this particular study, 6,642 16-year-old adolescents of a population based in Northern Finland, born around 1986, were tracked well into their late teenage years.

Data showed that preterm birth was associated with higher blood pressure in adolescent girls and an abnormal lipid profile in boys, predisposing them to early atherosclerosis. These associations were the strongest among those born early preterm, but babies born between 34 and 36 weeks were also at an increased risk.

The bottom line is that the shorter the time a baby spends in the mother's womb, the higher the risks are for cardiovascular disease later in life.

Read the full, original story: [Cardiovascular risks for preemies: Are there other factors at play?](#)