

Link discovered between preterm birth and risk of heart disease

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Abnormalities in a type of cell involved in blood vessel development and healing may explain why adults who were born prematurely are at increased risk of high blood pressure and other heart alterations, according to new research presented at the American Heart Association's Council on Hypertension 2016 Scientific Sessions.

Researchers at the University of Montreal compared the function of endothelial colony-forming cells (ECFCs) – which help maintain healthy blood vessels – taken from 30 young adults (21-28 years old) born very preterm (less than 29 weeks gestation) and 30 young adults born at term (37 or more weeks gestation). Among the findings:

- In lab tests, the cells from preterm adults were slower to form colonies, a key step in forming new capillaries;
- In preterm adults, slower colony formation was associated with two risk factors of heart disease, a higher systolic (top number) blood pressure and enlargement of the heart's left pumping chamber.

Abnormal function of ECFCs has also been associated with early complications of [preterm birth](#). For example, prolonged oxygen therapy exposure and consequent development of lung disease.

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Provided by American Heart Association

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