

Babies with eczema at higher risk of tooth decay

Link found in local study; doctors believe it's first time such a link has been discovered

Linette Lai

Babies with eczema – the medical condition that causes patches of dry, itchy skin – are three times more likely to get tooth decay as they grow up, a local study has found.

Doctors surmised that “structural defects”, occurring when a baby is being formed in its mother’s womb, could be the biological mechanism behind both conditions. Doctors, commenting on the study, believe this is the first time a link between these two common childhood diseases has been discovered.

The study was a collaboration between the National University of Singapore’s dentistry faculty and the Singapore Institute for Clinical Sciences at the Agency for Science, Technology and Research. It was published in the *Journal Of Allergy And Clinical Immunology* earlier this month.

Researchers interviewed the parents of more than 500 infants to determine whether their offspring had eczema. The babies also underwent skin prick tests for common allergies.

They were then divided into

PREVENTING TOOTH DECAY

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three groups: those who tested positive and had eczema, those who were diagnosed with eczema but tested negative, and those with no eczema at all. The children returned for check-ups at ages two and three, when doctors looked at their oral health.

Researchers found that the children who had both eczema and positive skin prick tests were three times more likely to have tooth decay. Both conditions are fairly common here. Eczema affects around one in five children of school age, while around two in five preschool children have tooth decay.

The study, part of a broader project involving over 1,200 Singaporean families, intends to map out how genes and the environment can affect children as they grow up.

“Our latest findings will give parents and caregivers of babies with eczema early warning of increased risk of developing tooth decay in toddlers,” said Dr Stephen Hsu, an associate professor at the NUS dentistry faculty, and one of the authors of the study. “Regular dental check-ups can then be conducted to help minimise the incidence of tooth decay in these children.”

The researchers are now conducting genetic analysis to confirm the biological mechanism responsible for their findings, and also looking at the link between tooth decay and other childhood diseases.

More work needs to be done before the eczema-management guidelines are re-evaluated, said Dr Mark Koh, who heads the dermatology service at KK Women’s and Children’s Hospital.

He said: “In general, parents should establish good dental hygiene habits for their children from young, to prevent tooth decay.”

linettel@sph.com.sg