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Mark E Moss and **Andrzej W Kedzierawski**. *Stochastic model of caries progression*.

Preliminary report.

We examine a stochastic model of caries progression based on a Wiener process between a reflecting and an absorbing barrier. Our model extends that based on a Wiener process with a single absorptive barrier and allows us to explain more precisely several epidemiological features of dental caries. For instance, it seems that the hazard function based on our model approximates very accurately the real life data. (Received October 02, 2000)