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White Coat Notes

News from the Boston-area medical community

MGH starts test of TB vaccine to treat type 1 diabetes

Boston researchers are testing an old tuberculosis vaccine in a new clinical trial to treat type 1 diabetes, enlisting the low-grade inflammation it causes in an effort to disarm abnormal immune cells that destroy insulin-producing cells.

The phase 1 clinical trial at **Massachusetts General Hospital** is based on experiments in mice directed by **Dr. Denise Faustman**, who was profiled in this Globe story last week. Delivering a TB vaccine used for almost 80 years to mice cured them of a form of diabetes close to the human disease. The mild inflammatory reaction caused by the Bacillus Calmette-Guerin vaccine wiped out the immune cells that mistakenly attack cells in the pancreas that make insulin.

Type 1 diabetics must rely on lifelong insulin injections to regulate their blood sugar levels. Previously called juvenile-onset diabetes, the disease carries a high risk of complications such as kidney damage, blindness, amputation, and cardiovascular disease. It is less common than type 2 diabetes, which is linked to obesity.

Dr. David M. Nathan, director of the MGH Diabetes Center, will lead the human study, which is recruiting participants. The trial is being supported by the **Iacocca Foundation**, other donors, and hospital funds.