

BIOG

Prof Stephanie Amiel

Stephanie Amiel is Professor of Diabetes Research at King's College London and a clinical diabetologist at King's College Hospital. She trained at Guy's Hospital, London and Yale University, Connecticut. Her research has included the pathogenesis of problematic hypoglycaemia in diabetes and interventions to reduce risk, including the development of the DAFNE structured education programme, deployment of newer technologies for insulin administration, islet transplantation and HARPdoc. She is author of over 200 original research papers, book chapters on diabetes management and reviews and chaired the 2015 NICE guideline development committee for the diagnosis and treatment of type 1 diabetes in adults.

SUMMARY

HARPdoc: improving outcomes of hypoglycaemia prevention pathways in type 1 diabetes

Structured education in flexible insulin therapy and improving technologies in glucose monitoring and insulin delivery are reducing the burden of hypoglycaemia for people with type 1 diabetes. Nevertheless, recent data show that 12% of adults with T1D report at least one severe hypoglycaemia over six months. Risk is skewed: 10% of one clinic population contributed 70% of all episodes, impaired awareness of hypoglycaemia being a major risk factor. Cognitive barriers to hypoglycaemia avoidance have been described.

HARPdoc, Hypoglycaemia Awareness Restoration Training for adults with T1D and problematic hypoglycaemia persisting despite otherwise optimised therapy, uniquely addresses the cognitive barriers and, after a successful pilot, has recently completed a randomised controlled trial against Blood Glucose Awareness Training, one of the few evidence-based interventions to improve endogenous awareness of hypoglycaemia. Ninety-nine people with IAH and severe hypoglycaemia, that had persisted despite structured education programmes and support from centres actively offering technology, were randomised. Compared to a population matched for diabetes duration, they had higher rates of positive screening for anxiety and depression and expressed more fear of hypoglycaemia, although 20% expressed low fear and those who endorsed the "barrier" cognitions (70%) had lower fear, a combination that might predict need of an intervention such as HARPdoc. Importantly, most had been offered technological solutions, fewer had accepted and many fewer were using it at recruitment.

The presentation will discuss the evidence-based pathway for hypoglycaemia avoidance, the theory behind the HARPdoc intervention; the intervention and its potential for improving outcomes to the management pathway.