The role of exenatide in managing cardiovascular risks and complications in patients with type 2 diabetes

The aim of this systematic review is to examine the role of exenatide BID in managing cardiovascular risks and complications in patients with type 2 diabetes. This involved a literature search including a general scoping of the data bases which found previous reviews relevant to the population and intervention of interest, but these were either more than 4 years old, were narrative reviews or included liraglutide and studies which were not randomized. The current systematic review is based only on randomized controlled studies. The literature search strategy for the review relied on previously published guidelines for reviews and was based on the Population (P), the Interventions (I), Comparative interventions (C) and Outcomes (O) which forms the PICO framework. A number of databases including EBSCO host, encompassing Academic search premier, Medline, Psychology and Behavioral sciences collection, PsycINFO, SPORTDiscus and Cumulative Index to Nursing and Allied Health Literature (CINAHL) were accessed. In addition, Boolean search strategy allowing the combination of search terms such as 'Exenatide' AND 'Diabetes' AND 'Cardiovascular diseases'; 'Exenatide' AND 'Diabetes' AND 'Glycaemic control'; 'GLP–1' AND 'Diabetes'; 'GLP–1' AND 'Diabetes' AND 'Cardiovascular diseases'; 'GLP–1' AND 'Diabetes' AND 'Macrovascular diseases'; 'Exenatide' AND 'Cardiovascular risks'; 'Exenatide' AND 'Cardiovascular complications'; Exenatide AND 'Glycaemic control' were used. The quality of the studies selected was evaluated using the checklists for quantitative studies out of which 10 randomized controlled studies which met the inclusion criteria were selected for the current review. The outcome measures included in the search were: Cardiovascular risks, cardiovascular complications, and glycaemic control. All the studies reviewed except 1 showed that the use of exenatide BID as a monotherapy or in combination with other medications was associated with reduction in most cardiovascular risks and complications such as weight, blood pressure, glycated haemoglobin which are associated with type 2 diabetes compared with control.

Biography

Omorogieva Ojo has done his PhD in Nutrition and Post-graduate Diploma in Diabetes. He is a Senior Lecturer in Primary Care and teaches across a range of courses and programs in the school. His key interest and areas of expertise are Diabetes and Nutrition which form the focus of his research and teaching activities. He leads the Diabetes Specialist Interest Group and Co-ordinates the Diabetes Care and Management course for post registration nurses and Patient Pathways of Care for pre-registration participants. He supervises both undergraduate and postgraduate research students including PhD students. His research interests are reflected in his 25 publications in reputed journals and 9 conference presentations. His work is recognized both nationally and internationally and has been a keynote speaker at the NNNG conference, a reviewer for journals and is an Editorial Board Member of many international journals.

o.ojo@greenwich.ac.uk