

Rituximab preserves beta cell function in type I diabetes

Rituximab preserves beta cell function in patients with type I diabetes, according to new research (*New England Journal of Medicine* 2009;361:2143–52).

In a randomised, double-blind study, 87 patients with type I diabetes received either rituximab (n=57) or placebo (n=30) infusions on days one, eight, 15 and 22. One year after the first infusion, the level of C-peptide was significantly higher in the rituximab group, which indicates that these patients had retained some beta cell function. Rituximab patients also had lower levels of glycated haemoglobin and needed a lower dose of insulin.

The number of adverse events was higher in the rituximab group after the first infusion. This study suggests that B lymphocytes are involved in the pathogenesis of type I diabetes, and highlights a potential new therapeutic area for its treatment.

Rituximab is currently licensed in the UK for use in non-Hodgkin's lymphoma, chronic lymphocytic leukaemia and rheumatoid arthritis.

Natasha Jacques, principal pharmacist for diabetes at the Heart of England NHS Foundation Trust, said: "It would seem unlikely that rituximab would become a mainstay treatment option for patients with type I diabetes mellitus in view of the side effect profile, high incidence of adverse effects, high cost and the fact that these patients would still require insulin despite the rituximab infusions. It is, however, an interesting study, which may lead to further developments in the management of type I diabetes."

Chemotherapy verification standards

New standards to ensure appropriate pharmacy practice in chemotherapy services are to be published by the British Oncology Pharmacy Association. The consultation document on the standards, which was launched this month and is available to all members of BOPA, highlights the verification steps that must be undertaken by an authorised pharmacist or other suitably competent individual before preparation and release of systematic anti-cancer medicines that are administered by parenteral and oral routes.

The verification steps include checking: that the treatment regimen is appropriate for the patient's diagnosis and medical history; that there are no known drug interactions; and that laboratory values are within the appropriate range.

Anne Hines, lead pharmacist at Merseyside and Cheshire Cancer Network commented: "Until now there has been no agreement or standardisation as to what constitutes a pharmacist check. The BOPA standards readdress this and will undoubtedly improve patient care as all oncology pharmacy services move to implement them. The standards are intended to be multidisciplinary so it is not essential that a pharmacist personally undertakes all the required checks. However, it is essential that trusts and chemotherapy services have policies in place to ensure that all the required checks occur before chemotherapy is taken by or administered to a patient."

She added: "For the first time, all oncology pharmacy services will be working to defined high standards of care. This is something that is long overdue for chemotherapy services in England."