INTRAVITREAL INJECTIONS. EFFECTIVENESS AND SAFETY BASED ON THE PLACE OF THE PROCEDURE

LINK TO FULL TEXT

Introduction: Intravitreal injections (IVI) are minimally invasive procedures for administering drugs into the eye. They are an important therapeutic step for the control of many ophthalmological disorders, including age-related macular degeneration (AMD), diabetic macular edema (DME), central retinal vein occlusion, and choroidal neovascularisation secondary to pathological or degenerative myopia.

Currently, the place where IVI are administered depends on the country in which they are performed, while in most European countries, IVI are performed in operating theatres used for minor ambulatory surgery, whereas in the United States or Canada they are performed in physicians consulting rooms or clean rooms. Although company core data sheets for drugs administered by intravitreal route, indexed in the European Medicines Agency, stress the need for this to be done under strict aseptic measures to prevent the risk of endophthalmitis, they do not specifically indicate the place of administration.

Objectives: To assess the safety and effectiveness of IVs, depending on the place of administration, operating theatre vs. consulting or clean room.

Methods: A systematic review of the literature no time limit was made of the medical literature until March 2014, contained both in leading computerised biomedical databases such as PubMed, Embase, ISI Web of Knowledge, Cochrane, etc., and in databases of ongoing studies. In addition, we conducted a general Internet search. The studies were selected by two independent assessors on the basis of a series of pre-established selection criteria. The data were then extracted using a purpose-designed form and summarised in evidence tables. Quality was assessed using different scales, depending on the nature of the study.

Results and discussion: The bibliographic search retrieved a total de 369 original papers. After a review of the abstracts, 28 were selected for full-text appraisal. Finally, 15 studies were included which fulfilled the pre-established inclusion criteria, comprising 2 systematic reviews, 3 primary comparative studies and 8 papers made up of guidelines, protocols, practice guidelines and 2 surveys, one of professionals and another of patients.

Although some studies reported lower rates of endophthalmitis in operating theatres than in consulting rooms, the outcomes showed that IVs were safe and posed a low risk of endophthalmitis, regardless of where they were administered. The authors advise that IVI be administered under sterile conditions in order to minimise risk. The studies did not report results on effectiveness, assuming that a drug's effectiveness was not in itself dependent on the place where the IVI was administered, provided that the measures recommended by the manufacturers for its administration were complied with. Patients expressed a preference for having the procedure performed in consulting or clean rooms as opposed to operating theatres, due to shorter waiting-lists and greater comfort. The costs generated by IVI administered in operating theatres were higher than those administered in consulting or clean rooms due, above all, to the increase in staff.

Conclusions: The results suggest that IVI can be administered both in operating theatres and in consulting or clean rooms, provided that a series of aseptic measures are implemented in line with the indications contained in the company core data sheets.