Abstract

Purpose: Randomized controlled trials and metaanalysis are considered to provide the best scientific evidence. Many times people assume that these type of studies are good, forgetting the importance of their methodological quality. In this paper we will try to do a critical appraisal of the quality, specially regarding to validity and the report of the results, of the randomized clinical trials published during one year, in one of the most important journals. Methods: Two investigators performed a manual electronic search further confirmed using pubmed, using randomized controlled trials as a limit. The studies were reviewed by two investigators with known experience in the critical appraisal of medical literature, using a previously published guideline. Results: 862 papers were published. Only 6% were randomized controlled trials. We found very important differences in the description of the randomization method. (only 36.5% of the authors mention the method they used), losses to follow-up (reported in 80% of the papers),and analysis ( intention to treat vs protocol). In many studies the method used to calculate the size of the sample is not mentioned, therefore the power to estimate differences is difficult to calculate. Results as scarcely (3.85%) reported with association variables like Relative Risk ( RR), reduction in the relative risk (RRR) or number needed to treat (NNT). Conclusion: In order to improve medical evidence in urology, a greater number of randomized clinical trials have to be performed. Their methodological quality needs to be improved, because in the reviewed papers it was not optimal, and that prevents us from considering these papers as the "best evidence" they are intended to be.

Keywords

Literature Critical Appraisal, quality.