Use of Glucocorticoids in Preoperative Prophylaxis: a Survey and a Literature Review.

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Anaesthesia may trigger IgE-mediated and non-IgE mediated reactions, especially in high-risk patients. Aim of this study is to evaluate the use of glucocorticoids in clinical practice and to find out the scientific rational for their correct clinical use if already evident in scientific literature.

We conducted a survey addressed to anesthesiologists of Campania Region (Italy), to assess the use of glucocorticoid in pre-medication in the patient at risk and we conducted a literature revision on PubMed using as keywords “glucocorticoid AND anaphylaxis”, “glucocorticoid AND anaphylaxis AND experimental AND cell”, “glucocorticoid AND anaphylaxis AND experimental AND animal”. Data obtained from the survey (949 questionnaires sent, 75 questionnaires answered) evidence that over 80% of anesthesiologists administer glucocorticoids for prophylaxis in patients at risk. Nevertheless, the use of glucocorticoids for the prevention of perioperative anaphylactic and pseudo-allergic reactions is supported by a few experimental data that indicate a potential effect in support of hydrocortisone hemisuccinate and methylprednisolone suleptanate. The efficacy and safety of glucocorticoids must be studied in experimental models, keeping in mind that there are species with a higher sensitivity to glucocorticoids (rabbit, mouse and rat) and species with a lower sensitivity (i.e. man, monkey and guinea pig).