

**PROJECT**

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**1) Project title**

Correlation Between Concentration at the Effector Site of Ketamine (Calculated With DOMINO Pump) and Bispectral Index Values During General Anaesthesia for Breast Surgery.

**2) Abstract**

Ketamine effects on increasing Bispectral Index (BIS) values have widely been described in literature, but Correlation between Concentration at the effector site of Ketamine (CeK) and BIS values during general anaesthesia for breast surgery has not been defined yet.

With this observational prospective trial, we want to analyze the correlation between decreasing estimated CeK values after a ketamine bolus delivered by Targeted Controlled Infusion (TCI), Domino model, and BIS values and BIS spectral array, determining if Ketamine effect on BIS is time-dependent or CeK-dependent.

After General Anaesthesia induction for Breast Surgery, delivered with Propofol and Remifentanil TCI (Schnider model and Minto model respectively) and skin incision, once reached a stable anaesthesia maintenance (BIS values between 40 and 60), we will perform a Ketamine bolus with TCI (domino model), recording both, BIS and CeK values, without modifying targeted Ce of Propofol and/or Remifentanil. The calculated sample size to reach statistical significance is 14 patients.

Inclusion Criteria: Undergo general anaesthesia with Targeted Controlled Infusion of Ketamine (Domino model), Propofol (Schnider model) and Remifentanil (Minto model). Adult women (age >18 years and < 65 years).

Exclusion Criteria: Neurological disease, Psychiatric disease, Benzodiazepines abuse, Obesity

This study protocol will be performed in Treviso Regionale hospital, and full ethical committee approval has been reached (Approval Number: 681/CE Marca )