

# **IMPLEMENTATION OF HYPERVENTILATION IN PATIENTS WITH CRANIOTOMY AT IBS EMBUNG FATIMAH HOSPITAL, BATAM CITY**

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## **ABSTRACT**

**Background:** Head injury is an emergency that requires fast and appropriate treatment to prevent high morbidity and mortality from this disease. This situation causes an increase in intracranial or intracerebral pressure, resulting in pressure on the blood vessels of the brain, causing a decrease in cerebral blood flow and leading to cell death.

**Objective:** To implement hyperventilation in patients undergoing craniotomy at the Central Surgery Installation (IBS) Embung Fatimah Regional Hospital, Batam City.

**Method:** In writing this case study, the author used a descriptive method, describing the nursing process approach which includes the assessment stages, formulation of diagnoses, nursing planning, implementation, evaluation and documentation.

**Results:** Ms. A and Mr. J indicated that both patients were diagnosed with Epidural Hematoma (EDH) and underwent craniotomy. Both patients showed the same anesthesia nursing problems, namely acute pain and ineffectiveness of preoperative cerebral tissue perfusion, risk of bleeding and risk of increased ICP intraoperatively and unclean airway postoperatively. Implementation of anesthesia nursing during intra-operation, namely the application of hyperventilation given intra-operatively to both patients

**Conclusion:** After the patient Ms. A and Mr. J was given hyperventilation during the craniotomy procedure, during intra-anesthesia the problem of anesthesia nursing, the risk of increasing ICP was resolved.

**Key words:** Craniotomy, Epidural Hematoma (EDH), Hyperventilation, Decreased ICP

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# **PELAKSANAAN HIPERVENTILASI PADA PASIEN DENGAN TINDAKAN KRANIOTOMI DI IBS RSUD EMBUNG FATIMAH KOTA BATAM**

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## **ABSTRAK**

**Latar belakang:** Cedera kepala merupakan keadaan darurat yang memerlukan penanganan cepat dan tepat untuk mencegah tingginya morbiditas dan mortalitas penyakit tersebut. Keadaan tersebut menyebabkan peningkatan tekanan intrakranial atau intraserebral sehingga terjadi penekanan pada pembuluh darah otak sehingga menyebabkan penurunan aliran darah otak dan berujung pada kematian sel.

**Tujuan:** Untuk menerapkan menerapkan hiperventilasi pada pasien dengan tindakan kraniotomi di Instalasi Bedah Sentral (IBS) RSUD Embung Fatimah Kota Batam.

**Metode:** Dalam penulisan studi kasus ini, penulis menggunakan metode deskriptif, menggambarkan dengan pendekatan proses keperawatan yang meliputi tahap pengkajian, perumusan diagnosa, perencanaan keperawatan, implementasi, evaluasi dan dokumentasi.

**Hasil:** Pengkajian Nn. A dan Tn. J menunjukkan bahwa kedua pasien terdiagnosa Epidural Hematoma (EDH) yang dilakukan tindakan kraniotomi. Kedua pasien menunjukkan masalah keperawatan anestesi yang sama yaitu nyeri akut dan ketidakefektifan perfusi jaringan serebral pre operasi, risiko perdarahan dan risiko peningkatan TIK saat intra operasi dan ketidakbersihan jalan napas saat post operasi. Implementasi keperawatan anestesi saat intra operasi yaitu penerapan hiperventilasi diberikan saat intra operasi pada kedua pasien

**Kesimpulan:** Setelah pasien Nn. A dan Tn. J diberikan hiperventilasi pada saat dilakukan tindakan kraniotomi, saat intra anestesi masalah keperawatan anestesi risiko peningkatan TIK teratasi.

**Kata kunci :** Kraniotomi, Epidural Hematoma (EDH), Hiperventilasi, Penurunan TIK

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