

INTISARI

PERBANDINGAN ONSET DAN DURASI ANESTESI ANJING YANG DIANESTESI KOMBINASI KETAMIN-XILASIN DAN KETAMIN-MEDETOMIDIN

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Perkembangan anestesi membuat praktisi dapat memilih anestetika mana yang lebih aman digunakan untuk prosedur operasi, baik operasi kecil maupun besar. Anestetika yang digunakan diharapkan dapat memenuhi kualifikasi yang dibutuhkan praktisi, antara lain memiliki onset yang cepat, durasi yang lama dan tingkat keamanan yang tinggi. Kombinasi anestetika menjadi salah satu alternatif yang digunakan selain penggunaan anestetika tunggal dan teknik anestesi inhalasi. Penelitian ini dilakukan untuk mengevaluasi kualitas analgesia dengan membandingkan onset dan durasi anestesi anjing yang diinjeksi dengan kombinasi ketamin-xilasin dan ketamin-medetomidin secara intramuskular.

Anjing dibagi menjadi dua kelompok, KX (ketamin-xilasin) dan KM (ketamin-medetomidin). Anjing tersebut diadaptasi terlebih dahulu dan dilakukan pemeriksaan darah untuk meyakinkan bahwa anjing tersebut sehat. Lima anjing diinjeksi dengan ketamin-xilasin (kelompok KX) dan 5 anjing lainnya diinjeksi dengan ketamin-medetomidin (kelompok KM). Pengamatan onset anestesi dimulai saat anjing diinjeksi anestetika sampai anjing teranestesi. Sedangkan durasi anestesi dihitung sejak anjing teranestesi sampai anjing sadar kembali. Data yang diperoleh kemudian diolah dengan uji T-test.

Hasil penelitian menunjukkan rata-rata onset kelompok KM lebih cepat daripada kelompok KX. P-value kurang dari 0,05 yang artinya durasi kelompok KM lebih lama dari kelompok KX. Kesimpulannya adalah kombinasi KM secara signifikan lebih efektif digunakan untuk prosedur operasi daripada KX karena memiliki onset yang cepat dan periode durasi yang lama.

Kata Kunci : Ketamin, xilasin, medetomidin, onset, durasi, farmakokinetik

ABSTRACT

ONSET AND DURATION OF ANESTHESIA COMPARISON IN DOGS INJECTED WITH COMBINATION OF KETAMINE-XYLAZINE AND KETAMINE-MEDETOMIDINE

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The development of anesthesia makes practitioners can decide which one of the agents that safer to be used for surgery procedure, whether it is mayor or minor surgery. Agents of anesthesia should have good qualification in order to can be used by practitioner, these qualifications are having short onset of action, long period of duration and safety. Combination of anesthetics become an alternative beside single anesthetic and inhalant anesthetic. The study was performed on ten healthy male dogs to evaluate the quality of analgesia with comparing the onset of action and duration of the anesthesia between dogs whom injected with combination ketamine-xylazine and ketamine-medetomidine via intramuscular route.

Dogs were divided into two groups, KX (ketamine-xylazin) and KM (ketamine-medetomidine). Adaptation and hematology test were done before. Five dogs were injected by ketamine-xylazne (KX group) and five dogs were injected with ketamine-medetomidine (KM group). Observation of onset anesthesia was started when the dogs are injected with anesthetics until they were anesthetized. Duration was measured from the time dogs were anesthetized until they regained consciousness. The data that collected should be tested by T-test.

The result of the study is the mean onset of ketamine-medetomidine was shorter than ketamine-xylazine group. P-value is less than 0,05 which mean the mean duration of ketamine-medetomidine was longer than ketamine-xylazine. This concluded that the combination of ketamine-medetomidine was effective to be used for surgery procedure than ketamine-xylazine.

Keyword : Ketamine, xylazine, medetomidine, onset, duration, pharmacokinetics