



Dental Anesthesia for People with CRPS/RSD

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Dentist Anesthesiologist

BILL ABERT

http://www.funnyjunk.com



“...and this is Ralph, your anesthesiologist.”

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Ralph Epstein, DDS

Dentist Anesthesiologist

- Clinical Associate Professor, Department of Hospital Dentistry & Dental Anesthesiology – Stony Brook Medicine
- Program Director, Dental Anesthesia Residency Program- Stony Brook Medicine
- Private Practice – Great Neck NY, Greater Long Island, and New York City
- Past Chairperson, NYS Board for Dentistry – 2010 - 2012
- Past President, American Dental Board of Anesthesiology – 2013 - 2014
- Past President, American Society of Dentist Anesthesiologists – 1993 - 1995

Plan for Today

- ~30 minute presentation
- State regulations for dentists (very specific to each state):
- Ketamine Techniques administered by dentist anesthesiologists
- Important considerations for CRPS/RSD patients having dental care
 - With and without sedation or general anesthesia
- Questions

State Regulations

- **Certificates required for administration of sedation and general anesthesia:**
 - Nitrous oxide
 - Minimal Sedation
 - Moderate Sedation/Conscious Sedation (including dissociative sedation)
 - Deep Sedation (Dissociative Sedation) & General Anesthesia)
- **Where does dissociative sedation fit into the definitions**
- **What medications can dentists administer?**
- **Is ketamine specifically mentioned in state regulations?**

Dentists cannot treat CRPS/RSD but they can treat patients with CRPS/RSD

Ketamine Techniques Administered by Dentist Anesthesiologists using Ketamine

- **Low dose ketamine typically administered with adjuncts to decrease dysphoria/hallucinations:**
 - Midazolam
 - Propofol
 - Dexmedetomidine
 - Narcotics
- **Low dose ketamine**
 - Intermittent IV push administration
- **Higher dose ketamine using infusion pumps for IV administration**
 - Propofol & Dexmedetomidine administered with infusion pumps



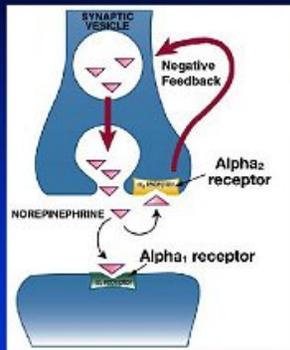
Why Dexmedetomidine (Precedex)? With Ketamine



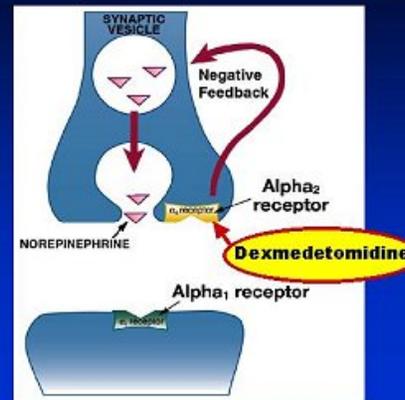
α_2 adrenergic receptor pharmacology

Adrenergic receptors

- Regulate release of neurotransmitters
- Control epinephrine, norepinephrine release
- Modulate sympathetic response "negative feedback loop"

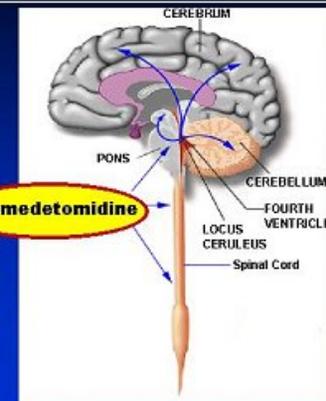


Dexmedetomidine mechanism of action



Dexmedetomidine, α_2 receptors, and the CNS

- Sites of action
 - Brain (locus ceruleus)
 - Spinal cord
 - Autonomic nerves
- CNS
 - Sedation/hypnosis
 - Anxiolysis
 - Analgesia
- Autonomic nerves
 - ↓ Sympathetic activity
 - ↓ BP, ↓ HR



***Important Considerations
For
CRPS/RSD Patients
Having Dental Care***



Pain Free Dentistry!!!

Whatever it may take

- **Profound Local Anesthesia**
 - Infiltration & Block local anesthesia
 - During procedure
 - Following procedure if postoperative pain is expected
- **Intravenous Sedation**
- **Deep Sedation/General Anesthesia**

Supporting Neck & Limbs

- Bolsters
- Gel supports
- Blankets
- Pillows

Limb Support

No support (Ligament stretching)



Support of wrist & elbow



Cervical Support



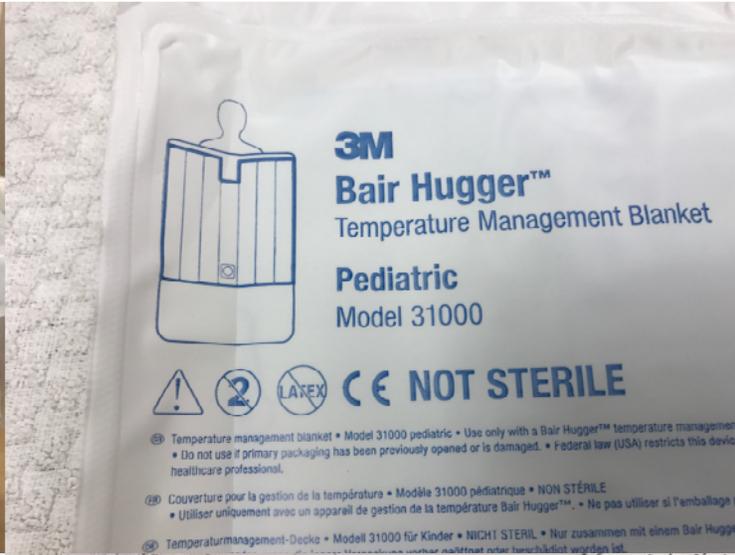


Additional Bolsters and Limb Support



Ventilation & Temperature Control

- Hot or cold air blowing on patient from ventilation systems
- Blankets
- Bair Hugger (Warm air blown into a special blanket)



Positioning – Making the Patient Comfortable

- **Positioning of Chair**
 - Supine position
 - Sitting-up position



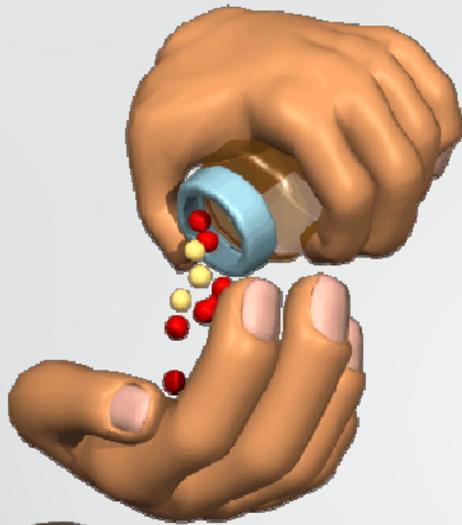
Collaboration with pain doc



Ouch!!

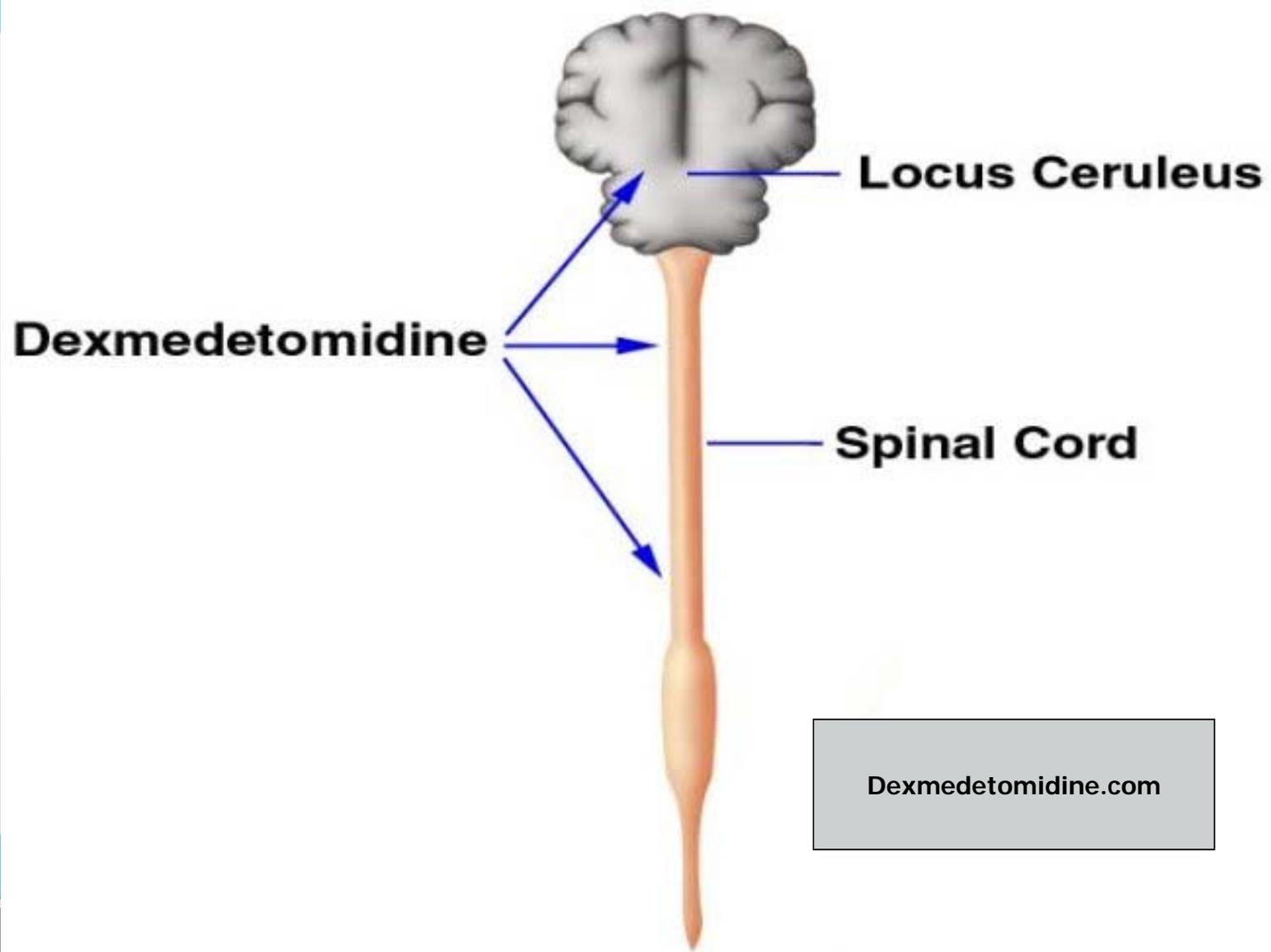
The End

*Questions
???*

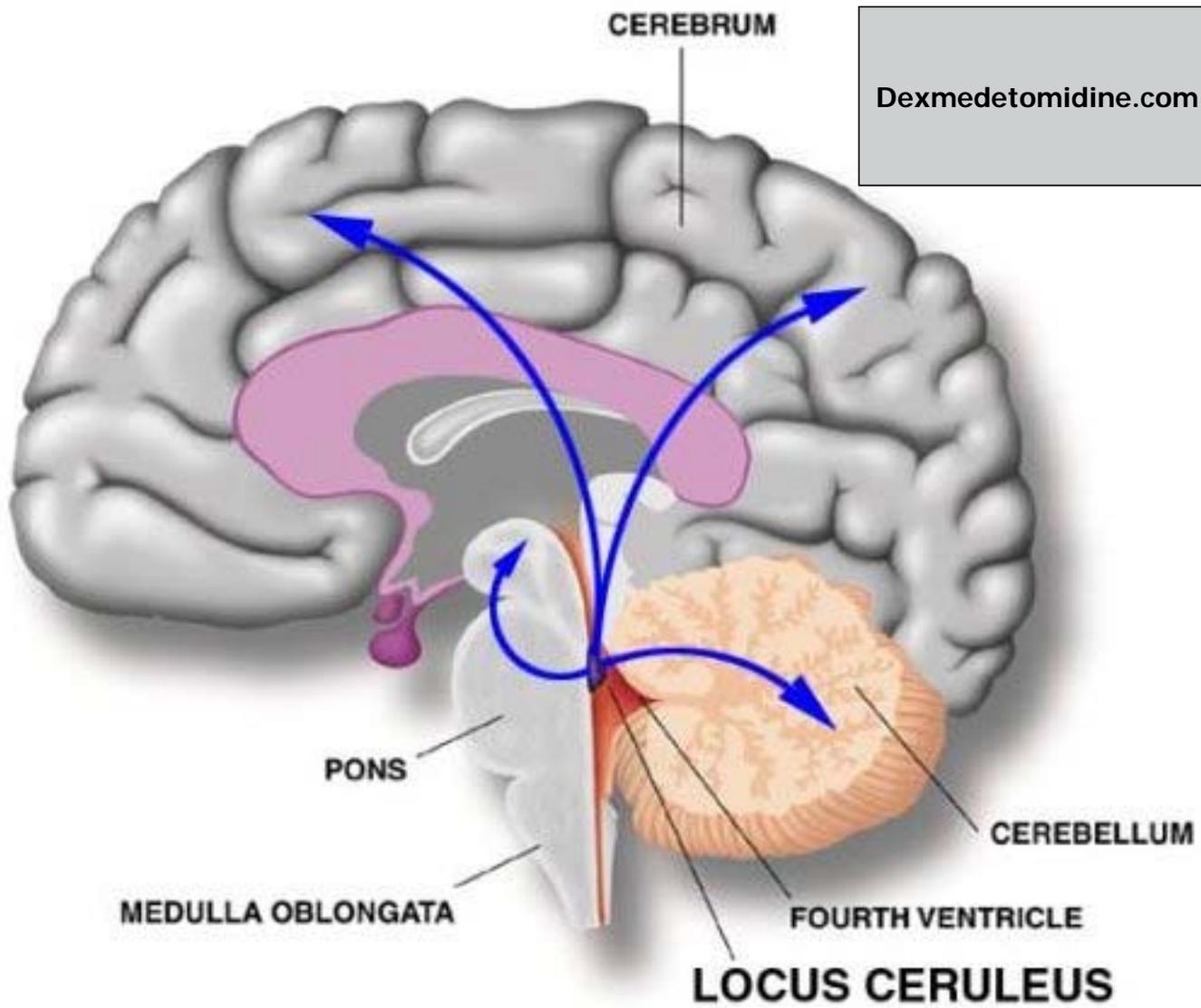


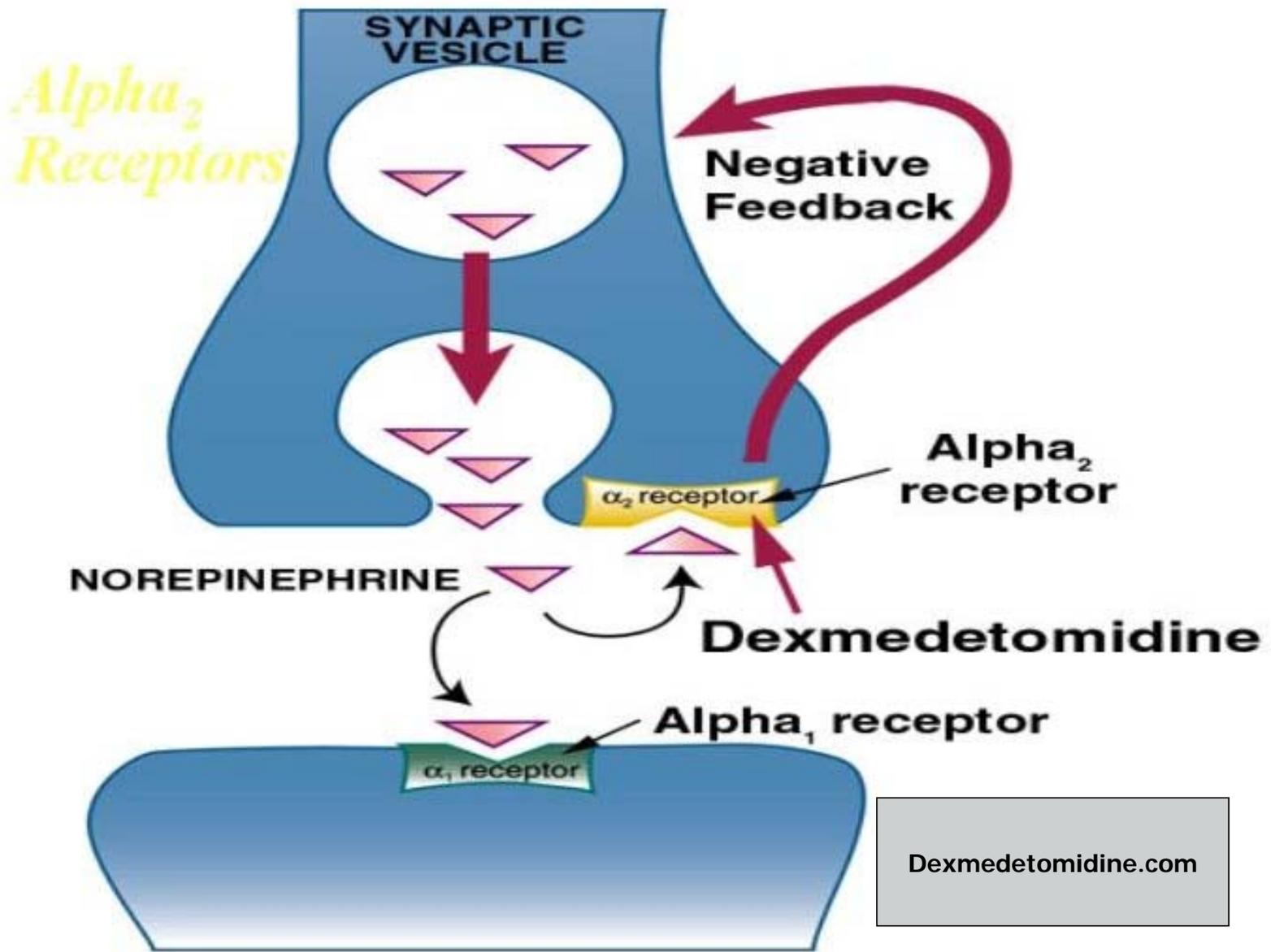






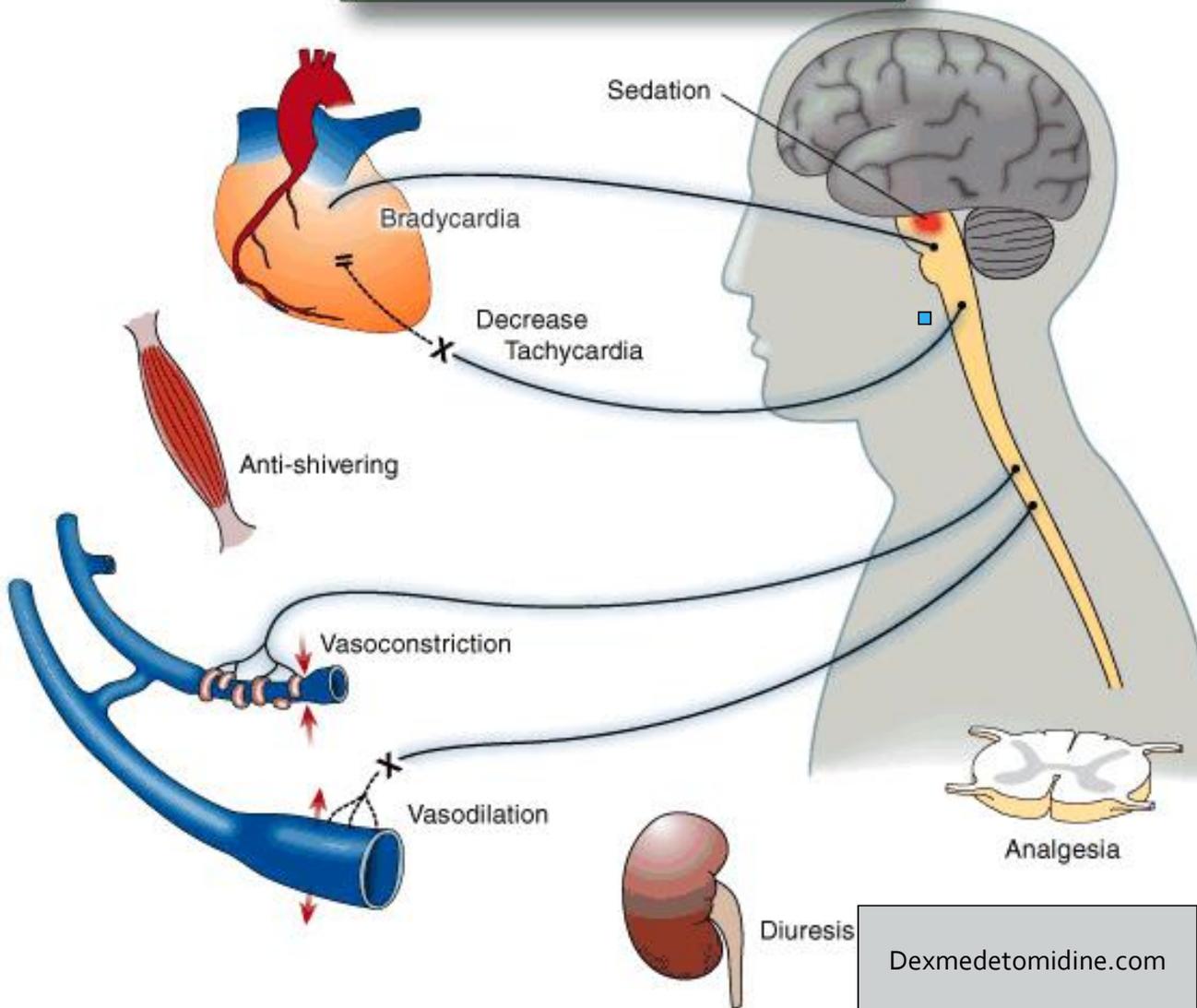
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Physiology of Alpha-2 Adrenoceptors



*Perioperative
Pain
Management*

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