

Cafeina

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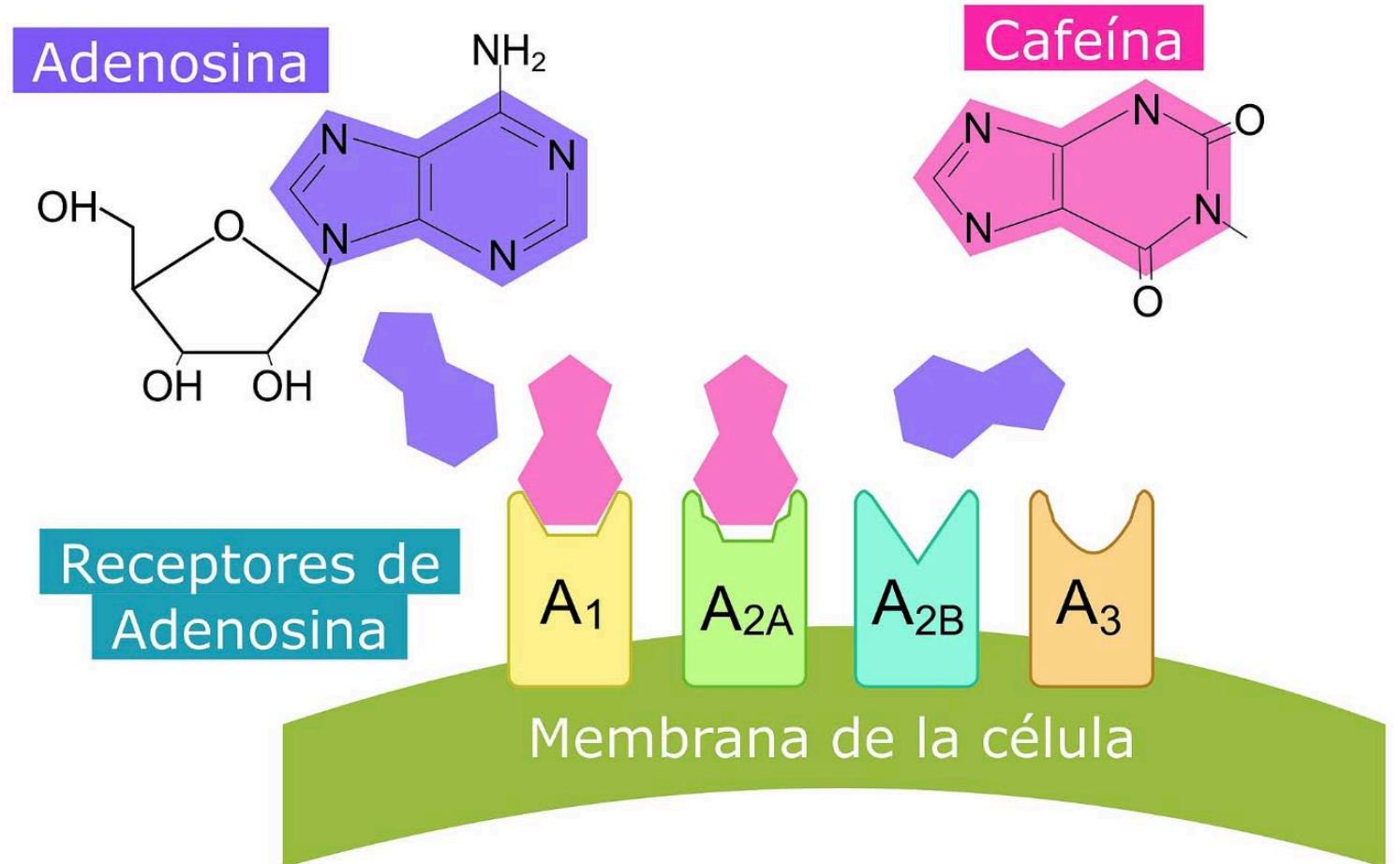
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Introducción

- * La cafeína o 1,3,7 trimetilxantina (MX) se introdujo por primera vez para el tratamiento de la apnea del prematuro (AOP) en los Hospitales de la Universidad McGill a mediados de la década de 1970 para obviar la necesidad de intubación y ventilación mecánica en recién nacidos prematuros con AOP recurrente que no respondieron a estimulación táctil

Mecanismo de Accion



Indicaciones

- *Apnea del Prematuro: Efectividad y seguridad de uso en apnea.
- *Facilitar extubación: Previene falla en extubación, si se administra 24 horas antes de una extubación programada o en las siguientes 6 horas después de una extubación no programada.

Table 1. **Recommendations for Caffeine Dosing**

Age (PMA)	Usual Dosing, mg/kg*	Alternative Option, mg/kg*
Birth to 34 wk		
Loading dose	20	Up to 80
Maintenance dose (once daily)	5–10 (Usually start at 5–8, increase to maximum of 10 as needed)	Up to 20
Maintenance dose after 34 wk	None established	Not studied

There is no known minimum gestational age at birth for treatment. Age at initiation of treatment is variable, but typically within the first postnatal week. Treatment is typically discontinued following resolution of clinically apparent apnea of prematurity-related symptoms, hence by 33–34 weeks postmenstrual age. Please see text for references.

*All doses refer to caffeine citrate. The caffeine base dose is 50% of the caffeine citrate dose. Recommended doses are identical for parenteral and oral administration.

Beneficios

Table 2. Therapeutic Effects of Caffeine in Infants Born Preterm

Established benefits

1. Treats apnea of prematurity (AOP)
2. Facilitates extubation, with shorter duration of intubation and noninvasive respiratory support
3. Reduces incidence of bronchopulmonary dysplasia/chronic lung disease
4. Decreases need for treatment of patent ductus arteriosus
5. Improves motor function and visual perception at 5-year follow-up
6. Reduces severity of retinopathy of prematurity

Possible or apparent benefits

1. Prevention of AOP-related symptoms, including intermittent hypoxia
2. Prevention of postoperative apnea in preterm infants undergoing general anesthesia
3. Prevention of apnea associated with viral bronchiolitis in young infants
4. Induction of anti-inflammatory cytokine profile
5. Incremental overall benefits if treatment initiated before 3 days of age

Adverse effects

1. Short-term: Mild transient symptoms, including tachycardia, irritability, diminished weight gain
2. Long-term: None known

Unknown

1. Potential benefits of extended duration of treatment after resolution of apparent apnea-related symptoms after 33–34 weeks postmenstrual age (PMA)
2. Potential adverse consequences of extended duration of treatment after resolution of apparent symptoms after 33–34 weeks PMA

Efectos Secundarios

- * Taquicardia, temblores, vómitos e hiperglicemia.
- * Estos efectos aparecen con valores de 15 a 20 mcg por ml de nivel sanguíneo.
- * Intoxicacion: Arritmias y convulsiones.

Cafeina PRenatal

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Caffeine exposure during pregnancy: Is it safe?

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Conclusion

- * Efectiva reduciendo la incidencia de apneas
- * Segura
- * No necesita medir niveles
- * Disminuye la necesidad de VMI y VMNI
- * Facilita éxito en la extubacion
- * Disminuye la incidencia de Displasia Broncopulmonar, Hemorragia intraventricular y Ductus
- * Efectos positivos a largo plazo en la función pulmonar y el neurodesarrollo
- * Al suspender cafeína, observar entre 3 – 8 días

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