

COMUNICACION

**A case of human bite by the pelagic sea snake,
Pelamis platurus (Serpentes: Hydrophiidae)**

Alejandro Solórzano^{1,2}

¹ Instituto Clodomiro Picado, Facultad de Microbiología, Universidad de Costa Rica.

² Serpentario Tropical, Av 1, C 9-11 San José, Costa Rica.

(Revised 13-X-1994. Accepted 1-XI-1994)

Resumen: Por primera vez se registra un envenenamiento humano causado por la mordedura de la serpiente marina *Pelamis platurus*. En un caso en Guanacaste, Costa Rica, el efecto del veneno fue local, causando solamente un fuerte dolor inmediato en el sitio de la mordedura. Los síntomas desaparecieron paulatinamente en tres días sin intervención médica.

Key words: Snakes, *Pelamis platurus*, snake bite, human envenoming, Costa Rica.

Information regarding human envenoming by the pelagic sea snake, *Pelamis platurus*, is scant and doubtful. It has been suggested that *Pelamis platurus*, with its small mouth and low venom yield, poses little threat to most humans (Ernst 1992), although Kinghorn (1956) stated that a death had been recorded in India, and Taylor (1953) cited a report from the seventeenth century aluding to the bite as being highly toxic. Interestingly, Kropach (1972) mentioned six symptomless bites by *Pelamis*. Human deaths remain unproven, although there exist anecdotal reports from Costa Rica, Panamá and Colombia (Campbell and Lamar 1989, see Pickwell and Culotta 1980 and Culotta and Pickwell 1993, for a review). Most reports from the region are equivocal (Ambrose 1956, Clark 1942, Curran and Kauffeld 1937, Grocott and Sadler 1958, Marinkelle 1966). Bolaños (1984) indicated no sea snake bites were reported from Costa Rica.

While collecting *P. platurus* on 22 January, 1993, near Playas del Coco, Guanacaste, Costa Rica, herpetologist William W. Lamar (100 kg, 1.82 m) was bitten by a subadult *P. platurus* approximately 550mm in total length. The bite occurred at 10:45 during high tide.

The right fang of the snake penetrated the dorsal surface of the left hand, adjacent and slightly superior to the proximal end of the first metacarpal. Although contact was only sustained for a fraction of a second, he felt pain instantly. The wound bled freely, but this may have been owing to immersion in water as collecting continued. Lamar applied oral suction to the bite immediately, and continued intermittently for 15 min.

The bite site became slightly edematous (within the first hour) and mildly discolored (within the first 2 hr), giving the appearance of a minor bruise. An area of approximately 1 cm (radius) around the site remained extremely sensitive to the touch for 36 hr. In addition, deep pain and slight stiffness in the wrist and thumb began within 1 hr of receiving the bite and continued for 28 hr. At no time were any systemic effects noted, and Lamar maintained an active pace throughout the period of pain. At 58 hr post-bite, all symptoms save slight sensitivity at the bite site had disappeared. Pressure-induced pain at the bite site continued until February 1. The wound healed rapidly and without incident. Medical treatment was not sought.

ACKNOWLEDGEMENTS

I thank W. W. Lamar (University of Texas at Tyler) for his collaboration, J. M. Gutiérrez for suggestions, and Rocío Monge for her assistance.

REFERENCES

- Ambrose, M.S. 1956. Snakebite in Central America. p. 323-329 *In* E.E. Buckley and N. Porges (eds). *Venoms*. American Association for the Advancement of Science. Washington, D.C.
- Bolaños, R. 1984. Serpientes, venenos y ofidismo en Centroamérica. Editorial Universidad de Costa Rica, San José, Costa Rica. 136 p.
- Campbell, J.A. & W.W. Lamar 1989. The venomous reptiles of Latin America. Cornell University Press, Ithaca: 425 p.
- Clark, H.C. 1942. Venomous snakes. Some Central American records: incidence of snake-bite accidents. *Am. J. Trop. Med.* 22:37-49.
- Cullotta, W.A. & G.V. Pickwell 1993. The venomous sea snakes: a comprehensive bibliography. Krieger, Malabar, Florida. 524 p.
- Curran, C.H. & C. Kauffeld 1937. *Snakes and their ways*. Harper and Bros, N.Y., 285 p.
- Ernst, C.H. 1992. *Venomous reptiles of North America*. Smithsonian Inst. Press, Washington. 236 p.
- Groccot, R.G. & G.G. Sadler 1958. The poisonous snakes of Panama. Mt. Hope, Canal Zone, Panama Canal Printing Plant. 38 p.
- Kinghorn, C. 1956. *The snakes of Australia*. Angus and Robertson. London. 197 p.
- Kropach, C. 1972. *Pelamis platurus* as a potential colonizer of the Caribbean sea. *Bull. Soc. Washington* 2:267-269.
- Taylor, E.H. 1953. Early records of the sea snake *Pelamis platurus* in Latin America. *Copeia* 1953:124
- Marinkelle, C.J. 1966. Accidents by venomous animals in Colombia *Industrial Med. Surg.* 1966:988-992.
- Pickwell, G.V. & W.A. Culotta 1980 *Pelamis, P. platurus*. *Cat. Am. Amph. Rept.*:225.1-255.4.