

Epicoelomic Fluid Therapy for Chelonians

Fluids are given by injection through the cranial inlet of the shell, immediately dorsal to the plastron with the needle parallel to the long axis of the shell and into or below the pectoral musculature.

To avoid the problem of controlling the head close so to the site of injection, the injection may alternatively be given caudal to a foreleg, again immediately dorsal to the plastron with the needle parallel to the long axis of the shell.



“It is possible that this [site of epicoelomic injection] connects to the pericardium and other natural fluid-storage sites making it ideally suited to fluid administration. Fluids seem rapidly absorbed without obvious complications and animals can accept 1-2% of body weight divided into small amounts and given several times throughout the day on a regular basis. This route suits critically-dehydrated patients, for example, those displaying anuria, sunken eyes and decreased skin elasticity.”

“Ease and speed of handling make the epicoelomic route ideal for most hospitalized chelonians unable to maintain their own fluid balance without intervention...In this author’s experience [S McArthur], absorption of fluid and circulatory support seem more likely to be guaranteed by administration of fluids by this route compared with the intraosseous or intracoelomic administration.”

(McArthur, S., Wilkinson, R., and Meyer, J. 2004. *Medicine and Surgery of Tortoises and Turtles*. Blackwell Publishing Ltd., Oxford)