Saprophytic soil and water bacteria were commonly encountered in carasses of gharial hatchlings along with human and animal gut flora. *Escherichia coli* (17), *Pseudomonas aeruginosa* (11), *Corynebacterium* sp. (8), *Bacillus* sp. (14) and *Staphylococcus* sp. (3) were isolated and identified as major causes of septicaemia. On Sabauraud agar medium only six samples yielded mycotic growth. Similar bacterial and mycotic causal agents could also be recovered from water and soil samples suggestive of the source of infection.

Similer observations have been made by Arora and Kumar (1985-89) who isolated *Corynebacterium bovis*, *Pseudomonas aeruginosa* and *E. coli* from digestive contents of dead gharial (*Gavialis gangeticus*) hatchlings kept at Crocodile Rehabilitation Centre, Kukrail (UP).

The bacterial isolates from carasses, soil and water were found to be highly susceptibile to commonly used antibiotics like ciprofloxacin, norflox, and chloramphenicol in comparison to oxytetracycline, cortramizole, cloxacillin and nitrofurantoin.

The present incidence of mortality due to septicaemia in gharial hatchlings, suggests that the gharials need fresh running water as opposed to the present stagnant pond system.

## Acknowledgement

The authors are grateful to the Director Research (Veterinary and Animal Science), Rajasthan Agricultural University, Bikaner and Incharge Jaipur Zoo for providing facilities to carry out the work.

## References

Arora, B.M. and P.M. Kumar (1985-89). Health Monitoring and Disease Surveillance. Research Project Report. Centre for Wildlife Conservation Management and Disease Surveillance, IVRI, Izatnagar, UP.

## SURGICAL EXCISION OF GRANULOMA IN AN INDIAN STAR TORTOISE

(GEOCHELONE ELEGANS)

P.V. Parikh, D.B. Patil, D.R. Barvalia, N.H. Kelawala and R.R. Parsania

Gujarat Agricultural University, Anand, Gujarat 388 001, India

Tumour removal, laceration repairs, abscess excision and hernia repair are all performed in reptiles in the same manner as in mammals (Jacobson, 1981).

A 26 years old female Indian Star Tortoise (Case No. 4905/454, Dt. 26.ii.1999) weighing 3.5 kg. and kept as an exotic pet was referred to the University College Hospital for tumorous growth in the neck. After clinical examination, it was decided to go for excision of the tumour. Accordingly, the turtle was sedated with Ketamine at 44 mg/kg. administered intramuscularly and the site was prepared for aseptic surgery. The tumour (Arecanut size) was excised by giving two elliptical incisions. Bleeders were clamped and ligated with #2/0 chromic cat gut. Skin sutures were taken with cotton thread using horizontal mattress suture pattern. Post-operatively, gentamicin at 10 mg/kg. was given intra muscularly for three days. The suture line was dressed daily with povidone-iodine spray. On 15th post-operative day sutures were removed. Histopathological findings revealed focal necrosis and granulomatous lesion.

Abscess occur frequently in turtles especially on the neck. The sharp defects of the free edge of the carapace may lead to trauma of the skin of the legs and to abscesses. A provisional therapy of gentamicin at 10 mg/kg. every 48 hours is advised for chelonians. Chronic granulomatous lesions of fungal origin are reported in chelonians (Zwart, 1986).

## References

**Jacobson, E.R.** (1981). Neoplastic diseases In: *Diseases of the Reptilia*, Jackson, O.F. and J.E. Cooper, (Eds). London, Academic Press, Inc., pp. 429-468.

**Zwart, P. (1986).** Infectious diseases of reptiles. In: *Zoo and Wild Animal Medicine*, II Edn. M.E. Fowler (Ed), W.B. Saunders Co., Japan. pp. 157-161.