

CONCLUSION

This article provides an atlas of normal radiographic anatomy of the thoraco-abdominal cavity of the ostrich, which should facilitate radiographic interpretation of pathological processes. The study provides additional anatomic information visualised in the ostrich that cannot be obtained from cadaver dissections. Adapting this study to other ratites should be possible, but one should be aware that a number of anatomical variations exist.

Additional diagnostic imaging techniques such as contrast studies of the gastrointestinal tract and urogenital system and ultrasound are currently being developed by the authors in order to provide a better understanding of the thoraco-abdominal cavity of the ostrich.

ACKNOWLEDGEMENTS

The first author would like to thank DAAD (Deutscher Akademischer Aus-

tauschdienst, Bonn, Germany) and NaFöG (Nachwuchsförderungsgesellschaft für Jungwissenschaftler, Free University of Berlin, Germany) for personal financial support. Thanks are also offered to the Onderstepoort Veterinary Institute for donating the ostriches for this project.

REFERENCES

1. Bezuidenhout A J 1986 The topography of the thoraco-abdominal viscera in the ostrich (*Struthio camelus*). *Onderstepoort Journal of Veterinary Research* 53: 111–117
2. Bezuidenhout AJ 1993 The spiral fold of the caecum in the ostrich (*Struthio camelus*). *Journal of Anatomy* 183: 587–592
3. Bezuidenhout A J. 1999 Anatomy. In Deeming D C (ed.) *The Ostrich – biology, production and health*. CABI Publishing, Wallingford: 13–49
4. Homco L D 1994 Diagnostic imaging of ratites. *Proceeding of Advances in Ratite Health Seminar* 1994: 27–35
5. McMillan MC 1986 Radiographic diagnosis of avian abdominal disorders. *Compendium on Continuing Education for the Practicing Veterinarian* 8: 616–632
6. Nickel R, Schummer A, Seiferle E 1992 *Anatomie der Voegel* (2nd edn). Paul Parey Verlag, Berlin
7. Proctor N S, Lynch P J 1992 The respiratory system. In Proctor N S (ed.) *Manual of ornithology – avian structure and function*. Yale University Press, New Haven: 205–213
8. Tully T N, Hillman D, Williams J 1995 Anatomic examination of an emu (*Dromaius novaehollandiae*) using diagnostic imaging: techniques and anatomic cross sections. *Proceedings of the Annual Conference of the Association of Avian Veterinarians, Philadelphia* 1995: 313–315
9. Wagner W M, Kirberger R M 2001 Radiography of the thoraco-abdominal cavity of the ostrich (*Struthio camelus*). *Veterinary Radiology & Ultrasound* 42: 134–140
10. Wagner W M, Kirberger R M 2001. Transcutaneous ultrasonography of the coelomic viscera of the ostrich (*Struthio camelus*). *Veterinary Radiology & Ultrasound*: 42 (in press)
11. Warui J W, Skadhauge E 1998 Morphological and functional anatomy of the cloaca and terminal colon of the African ostrich. *Proceedings of the 2nd Ratite Congress, Manchester, Great Britain* 1998: 88–90
12. Williams J 1998 Diagnostic imaging. *Veterinary Clinics of North America: Food Animal Practice* 14: 421–435

Book review — Boekresensie

International aquatic animal health code

2001. Office International des Epizooties, Paris, 164 pp., soft cover. Price €40. ISBN 92 9044 538 6

It is well known that aquaculture is a rapidly expanding industry, but it is not always recognised that aquaculture is also a rapidly diversifying industry. Whereas traditional agriculture relies primarily on a limited number of domesticated species, none of the species used for aquaculture are fully domesticated and most are entirely undomesticated. In addition, new species are continuously being found suitable for culture in intensive production systems. The list of significant diseases of aquatic animals is growing as rapidly as the aquaculture industry itself. Internationally, the effects of translocation of species and the implications of intensive animal production in shared aquatic bodies are increasingly recognised. The need for guidance in managing the risks posed by international trade in aquatic animals and aquatic animal products is addressed by the Fish Diseases Commission of the Office International des Epizooties. In the foreword to the 2001 edition of the International Aquatic Animal Health Code, it is stated that both the Code and its companion work, the Diagnostic Manual for Aquatic Animal Diseases, will be reviewed annually, with a new edition of the Code printed every year.

The International Aquatic Animal Health Code provides guidance on certification of the health status of aquatic animals for international trade, as

well on import risk analysis and procedures to limit risk during import and export. A section on contingency planning has been added. Specifics on control measures for notifiable and significant diseases are listed in separate chapters. Information on hygiene includes useful chapters on disinfection of fish eggs and aquaculture facilities. Model international health certificates for different types of aquaculture products are again included, with the addition of a certificate for dead crustaceans. Any regulatory authority involved in aquatic animal health will find in the contents of the Code a complete framework for developing control measures to limit the spread of disease. A wealth of relevant detail is present, for example the table on disinfectants for fish farms. It lists all the commonly used disinfectant processes, both physical and chemical, and gives the indications for use as well as the dosage or method of use. The Code is primarily aimed at regulatory authorities and is unlikely to be of interest to the general practitioner or aquaculturist. However, it is required reading for anyone involved in certification or any other aspect of disease control in aquaculture at a national or international level.

A Mouton

Regional Veterinary Laboratory
Stellenbosch