EDITORIAL

CAMEL FORENSIC MEDICINE- A CHALLENGING SPECIALISATION

Camel forensic medicine is an emerging branch of veterinary science that applies forensic principles to legal cases involving camels. Its importance lies in determining the cause of injury or death in camels in medicolegal contexts, investigating animal cruelty, and providing expert analysis in cases such as insurance claims, ownership disputes, and vehicle collisions involving camels. The primary institute specialising in camel forensic medicine in the Arab world is the Camel Forensic Laboratory located in Dubai, United Arab Emirates. It is part of the Central Veterinary Research Laboratory (CVRL) and provides testing and research facilities to the UAE and neighboring countries. Other notable camel veterinary and research centres that may handle forensic pathology as part of their broader work include Dubai Camel Hospital, Advanced Scientific Group (Abu Dhabi), ADAFSA Collaborating Centre for Camel Diseases (Abu Dhabi), Camel Research Centre- Dept of President's Affairs (Abu Dhabi): which in an impressive facility for camel and falcon research. In Saudi Arabia, the Salam Veterinary Hospital (Beda, Buraydah) is known as the world's largest camel hospital, this state-of-the-art facility combines modern medicine with advanced research, including extensive laboratories equipped for over 160 types of analyses essential for diagnosing diseases. Tharb Camel Hospital (Al Uwaynah) of Qatar is a specialised hospital offering a range of medicines and treatments for camels with all necessary facilities and staff. These institutions focus on various aspects of camel health, disease, genetics, and welfare, often collaborating with international bodies like the World Organisation for Animal Health (WOAH) through initiatives like CAMENET (Camel Middle East Network) for disease surveillance and pathology.

Forensic pathology in camels helps veterinarians and law enforcement determine if injuries or death were accidental, natural, or a result of malicious intent or neglect. Veterinary forensics provides the necessary tools and evidence to investigate and prosecute cases of abuse or neglect, ensuring animal welfare protection. Identification of remains and origin is done through the techniques such as DNA analysis (including mitochondrial DNA sequencing) which are used to determine the species of origin of animal remains or products. Forensic studies, such as the detailed anatomical and radiological descriptions of camel skulls, help veterinarians differentiate between fractures caused by trauma and natural anatomical features like sutures, which is critical for accurate diagnosis and legal documentation. Forensic investigations help in tracing disease outbreaks such as Middle East Respiratory Syndrome (MERS-CoV) and understanding transmission dynamics, which is crucial for public health and safety. Forensic veterinarians provide crucial evidence and expert testimony in legal cases (e.g., insurance claims, criminal prosecutions), requiring standardised methodologies for sample handling, documentation, and analysis to ensure the evidence is admissible in court.

There is need for standardised research in camel forensic medicine that can also lead to a better scientific understanding of camel biology, disease resistance, and unique physiological adaptations, which can have broader applications in general veterinary medicine and potentially human health (e.g., nanobodies research). In essence, camel forensic medicine provides the robust scientific and legal framework to address complex medicolegal issues involving camels, an animal of significant cultural, economic, and medicinal importance in many parts of the world.

Current issue has many good manuscripts on diverse topics which will enrich the knowledge of dromedary and Bactrain camel science to the readers. These include the role of acute-phase proteins as biomarkers for health and disease in camels: a comprehensive review, gross and microscopic hepatic lesions of dromedary camels slaughtered in eastern province of Kingdom of Saudi Arabia, ncRNAs regulation of salt and drought resistances in camels, my journey to camel science by Rolf Karl Schuster, Saritha Sivakumar, Abdelmalik Khalafalla and Lulu Skidmore, fracture management

in the racing camel, rift valley fever – a neglected pathogenic virus of camelidae, seroepidemiological studies for the detection of antibodies of six infectious diseases in Kenyan dromedary camels, application of bactrian camel-derived nanobodies in the detection of foodborne pathogens, joint injections in camels: a review, haematological variations before and affter blood transfusion in Arabian racing camels, electrocardiographic measurements in the camel, assessment of camel feed resources: woody species stand structure, species richness, and diversity in Tsabong Ecotourism Camel Park, south-western Botswana, target-centric approaches for camel milk adulteration detection: a review of protein-, metabolite- and gene-based analytical strategies and first phenotypic characterisation of local dromedary camel ecotype in el oued region, southeast Algeria.

I congratulate the entire team of Editorial board of JCPR whose services and contributions since last 32 years has led to international recognition to this journal in form of Gourmand Award which was received by me at Riyadh, Saudi Arabia on 30th November 2025. I wish all the members of the editorial board and our esteemed readers a happy Christmas and New Year 2026.

(Dr. Tarun Kumar Gahlot)
Editor