

THERAPEUTIC POTENTIAL OF CAMEL WHARTON JELLY MESENCHYMAL STEM CELLS (CWJ-MSCS)

Therapeutic potential of Camel Wharton Jelly Mesenchymal Stem Cells (CWJ-MSCs) in canine chronic kidney disease (CKD) model has been explored by the Egyptian scientists. Umbilical cord specimens were obtained fresh from a healthy pregnant camel for further processing. Isolated CWJ-MSC was identified by morphology and flow cytometric analysis. The serum creatinine level was significantly decreased at the 4th week just after the 1st stem cells injection. Such research opened avenues for use of the tissue of camels for stem cell preparation and this could be useful to treat many diseases in animals. Saudi scientists carried out research on natural camel milk products and found that unique properties of camel milk may reduce oxidative stress in the consumers, ameliorating many conditions, including those of the CNS, such as autism spectrum disorders (ASDs). Treatment of ASD with raw and boiled camel milk resulted in significantly lower Childhood Autistic Responsiveness Scale (CARS) scores.

Last quarter of the year had many activities and conferences based on camels. Camel Charisma and LPPS (Lokhi Pashu Palak Sansthan) jointly organised the Godwar Camel Cheese Fest from 23-24 November 2022 at the site of the Kumhalgarh Camel Dairy near Ranakpur-Sadri, India. JANVRY, second festival of camelids was organised in France. The festival (17-18 September 2022) included conferences, camel show, degustation and selling of camelid products (pasteurised and powder milk, kefir, cheese, sweet, cosmetic, wool). The Saudi Veterinary Medical Society held its first international conference from 11-13 October at King Faisal University, Al-Hasa, Saudi Arabia. It included many lead and research papers based on camels. First International Conference on the safety of camels was also organised by the International Camel Organisation on 27th July at Riyadh.

The year 2022 had 52 manuscripts published on various aspects of dromedary and Bactrian camels in the Journal of Camel Practice and Research. Highest number of research manuscripts were based upon immunology (15.38%) followed by diseases (13.6%), parasitology (11.5%), reproduction and anatomy (9.61%), production (7.69%), imaging (5.77%), physiology, microbiology, pharmacology, lameness and genetics (3.8%, each), pathology and surgery (1.92%, each). This indeed shows a current trend of research in camel science.

The current issue of JCPR has two review papers which are related to brucellosis and immune system of camels. It has another 3 manuscripts based on parasitology and 2 manuscripts based on MERS disease and nutrition, each. Interesting manuscript on antidiabetic, anticollitis and anticancer activities of camel milk has given a new confidence for an advantage to the human health although more validation of such results are needed.

I wish Merry Christmas and a Happy New Year 2023 to all the members of the editorial board of JCPR and camel scientists worldwide. I am sure that JCPR will make new strides in the new year 2023.



(Dr. Tarun Kumar Gahlot)
Editor