



Original Article



Janak is back on track - The success story

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Animal racing is a popular form of sport for the entertainment of the people and the in-situ conservation of the indigenous breeds of different animals. Animal racing events possess a distinguished history and have been practiced in civilizations since ancient times i.e., Chariot horse races in 648 BC. A wide variety of animal species used in racing sports events across the world include bigger mammals like horses, bulls, buffaloes, camels, elephants, dogs, goats, pigs, yaks, reptilian turtles, birds-pigeons; small mammals like hamsters, mice, and even invertebrates like snails.

Horse racing has been an elite form of sport, but bull, buffalo, camel, or yak racing events have been proven equivalent to horse racing for common people across India. These racing events are named differently according to their geographical locations and linguistic features. Bull racing events organized in various Indian states are named Bailgada Sharyat in Maharashtra, Jallikattu in Tamilnadu, Kambala in Karnataka, and Maramadi or Kalappottu in Kerala. Cattle breeds used in such races are Kangayam, Ongole, Pulikulam, Mysore and Khillar. The winning bulls are also entitled to tags like the 'Pride of Maharashtra' or 'Hind-Kesari' according to the event criterion. Humongous crowds are drawn to such racing events to cheer up the teams and for their entertainment.

This is the story of one such bull who races in intra-state racing events of Maharashtra. Janak is a 13-year-old Khillar breed bull from western Maharashtra who has participated in district and state racing events since he was two years old. He has been a victor, holding a few of the highest titles of the race on multiple occasions. Normally, in such bull races, a horse runs a few meters forward to the racing bull pairs to guide the bulls to remain on their race track.

One day, in such a district-level racing event of Khillar bulls, Janak met with an unfortunate accident while mid-way on the race track. The horse, who was supposed to guide the bulls, suddenly got distracted and irritated mid-way through the track, turned, and started running backward towards the advancing bull pairs. As an elite and active bull, Janak was running at first position with his fellow racer bull and thus was the first to encounter the forthcoming collision from the guide horse. The unforeseeable collision occurred in the spur of the moment. It was devastating (Fig. 1). The juggernaut of spectators was left awestruck with astonishment and questions like what had happened and how?

Luckily, the other bull in the pair narrowly escaped the collision. The colliding guide horse was also standing soon after the collision with a few scratches over his head, chest, and forelegs and was walking normally. But poor Janak was lying on the track with a load of yoke and cart over his body. Janak got rolled over twice on the track due to the speeding momentum. Blood was oozing out from his mouth and nostrils profusely. Surely, he had encountered severe head injuries resulting from the impact of such a forceful collision. His lower jaw was found broken and hanging away from its normal position. Certainly, Janak has got both his lower jaw bones fractured. His owners were in gruesome worry and anxiously concerned about their champion bull's present condition. The first aid therapy was done on the race track itself by the local veterinarian, with ice and cold water applied over the head to stop the bleeding and inject painkiller drugs. The local vet advised owners to get Janak to the department of Surgery & Radiology, Krantisinh Nana Patil College of Veterinary Science, Shirwal for appropriate surgical intervention. Janak was loaded in a properly cushioned and spacious vehicle with caution not to disturb his wounds, and his jaw was bandaged with a soft, clean cotton cloth to avoid further damage on his way to the nearest multi-specialty hospital-KNPCVS, Shirwal, which was a 6 hours journey from the racing location. The owners with Janak immediately headed to the hospital (Fig. 2).

On arrival to the hospital, immediate pain relief was provided with more potent analgesic medication, and fluid therapy was instilled along with few emergency drugs to stabilize the disturbed physiological parameters of Janak (Fig. 3). Due to availability of advanced diagnostic imaging techniques at KNP college, Shirwal, x-ray imaging of head, chest and forelegs was done soon after the stabilization. Janak's blood sample was sent for hematological examination and liver and kidney function tests. It was revealed in an x-ray image that Janak had sustained complete fractures of both his lower jaw bones called mandibles (Fig. 4). Similar findings were laid down by Ducharme (2004) while studying oral surgical disease. Fortunately, only the horizontal portion of the mandibles were broken, the vertical rami were intact and there were no multiple fragments of the bone as explained by Bhatia et al (1978). With advancing age, generally, the liver and kidney parameters get disturbed and thus increase the intraoperative risks of anesthesia. But fortunately, his blood and serological test results came as normal, which meant that the chances for anesthetic complications would be minimal during the surgery. It gave the owners a ray of hope about the reparative surgery of Janak's lower jaw. As the wound was present in the oral cavity, owners were told about the predictive value of the surgical intervention that there might be postoperative complications like wound or pin tract infections due to chewing of feed as the feed particles will get adhered to wound site and may lead to growth of disease-causing microbes. Owners' counseling was done about the surgical intervention to be performed and postoperative care protocols due to the long-term healing

nature of bone tissue. Owners have shown a great deal of faith in the surgeons and their plan of work and gave a positive nod to go for the invasive surgical procedure. After a thorough discussion about various techniques to fix the broken jaw bones, it was decided that the fractured jaw would be reconstructed by inserting medical grade stainless steel rods in fragments of both the jaw bones, and both the fragments will be held in place with orthopedic wires as a method of reinforcement.

Surgery was scheduled after 3 days so the bleeding and swelling is reduced and Janak was hospitalized. Janak was kept off-feed for 72 hours and water was removed 16 hours prior to the day of surgery. However, he was supported with ample fluid therapy and pain management protocol to prevent any complications during surgery. Anesthesia was achieved with injectable anesthetic drugs and local analgesia so that Janak remained unconscious and pain-free during the whole surgery. After a 4.5-hour long session of tiresome surgical procedure, both the broken lower jaw bones of Janak were fixed using a combined rod and wire technique (Fig. 5). Owners were still nervous about his condition. Still, when Janak recovered uneventfully from the anesthesia, his owners could not hide their tears of joy and were celebrating cheerfully on successful surgery of their champ. Janak could listen to his owner's commands but was unable to respond due to the combined effect of post traumatic exertion and partial waning of anesthesia. Antibiotics, painkillers and a few supportive medications were administered to Janak along with fluid therapy to avoid infections, pain and other post-surgical complications. He was admitted for two weeks postoperatively in the hospital and was closely monitored and treated accordingly for better outcome and restoration of the lower jaw functions to its normal. No pus or other complications at the fracture site were noticed during that period. Janak was regaining his vigor and was discharged from the hospital after a stay for a fortnight. His owners were strictly advised to provide him with liquid diets like blended clover leaves, sugarcane, beet, carrot and other juices in small amounts and fine paste of concentrate feeds after soaking them overnight. This was done for two weeks and later gruel feeding was initiated. Janak was able to move his jaws properly from the 4th day after the surgery, chew, enjoy his green fodder, and concentrate properly after 40 days of surgery.

Despite staying far away from the hospital, owners could bring Janak for follow up and postoperative monitoring twice to Krantisinh Nana Patil College of Veterinary Science College, Shirwal under MAFSU, Nagpur on 30th and 45th day postoperatively. It was noticed that the implanted rod and wires were still in place without causing formation of any pus pockets or tracts and implants were removed 50 days after the surgery with ease. Janak was in his fine fettle and was ready to get down to the race tracks within six months of the injury. Kudos to the owners of Janak for they trusted the doctors' advice and took great postoperative care of their bull with immense patience. The decision to undertake the surgery by the owners to save the old bull was the prime decision, knowing the risk involved and the willingness to do everything that takes and all possible care by the owners was appreciable (Fessler JF and Adams SB ,1996). The owners have been in continuous contact with the doctors and keenly followed the instructions given by them. Thus, the timely availability of veterinary expertise, application of scientific knowledge, advanced imaging and surgical techniques, owner's faith in doctors, and their cooperation in strict postoperative care followed as guided by the experts, saved precious animals like Janak.

The melancholic monsoon season was over, race tracks were dry and ready, and were calling again for the racer bulls with a swarming audience. Owners have provided ample rest and proper

care to Janak for his quick recovery. Announcements of various upcoming racing events with luring prizes were being made and circulated among the racing bull owners (Fig. 6). Janak participated in one of such state-level racing events, lo and behold, yet again he bagged the fastest racer bull title after finishing first with 11.71 seconds race time in covering 450 feet track (Fig. 7). Janak bounced back as a champ and has proved that age is just a number and has made his owners proud, once again!

CONCLUSION

Thus, with timely intervention using advanced veterinary services and techniques based on scientific knowledge and owners' patience and faith in doctors, especially during the postoperative period, quick and uneventful recovery of injured animals like Janak can be achieved with minimal to no postoperative complications and a better quality of life can be provided to such animal patients.

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Images of Janaks journey from trauma to the recovery.



Fig. 1: Moment of Janak colliding with horse



Fig.2: Janak brought to hospital with 1st aid treatment



Fig. 3: Injury sustained by Janak



Fig. 4: X-ray showing broken lower jaw bones



Fig.5: Surgical treatment using interdental wiring and mandibular pinning



Fig.6: Janak going for race after recovery

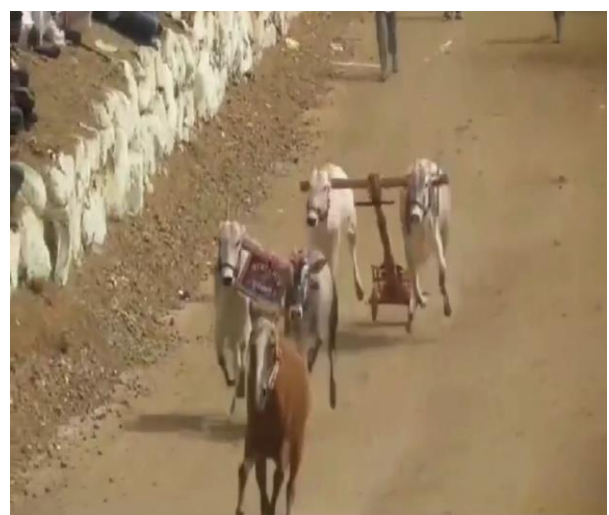


Fig.7: Janak is back on racing track