

Keyhole Surgery First for Scottish Vet

✖ A Royal Zoological Society of Scotland vet has become the first in the world to perform ground breaking keyhole surgery on an Asiatic black bear (also known as a Moon Bear) in Vietnam.

The procedure was carried out by leading RZSS vet Romain Pizzi, the only veterinarian in the UK specialising in zoo and wildlife keyhole surgery. He has performed over 360 procedures in the past four years and has pioneered several new laparoscopic techniques. Romain was asked to go out to Vietnam by the charity Free the Bears.

Although keyhole (or laparoscopic surgery as it is also known) is routine in humans, the standard procedure in animals is still open abdominal surgery. Open abdominal surgery is 20 years behind human medical advances and has a number of negative factors on animals such as large, painful wounds, post-operative pain, slower recovery and a higher risk of post-operative complications and infections.

The bear, called Map-map, is one of nine bears living at the Mekong Delta Bear Sanctuary near Rach Gia in South-west Vietnam, after being rescued by the Vietnamese Forest Protection Department in cooperation with international charity Free the Bears and its local partner Wildlife At Risk.

Asiatic black bears are kept for bile farming in Vietnam and other countries in Southeast Asia, and their bile, which is collected via repeated needle puncture of the gallbladder, is then used in traditional Asian medicines.

Bears that have been previously rescued from bile farms have demonstrated a very high incidence of gallbladder and liver disease related to the practice of 'milking' bile, and up to

47% of bears later died of liver and gallbladder tumours, a consequence of the chronic inflammation and infections caused by invasive bile collection techniques.

Romain said: "The operation has been a great success and the bear Map-map has made a speedy recovery.

"Laparoscopic surgery is still very uncommon in veterinary medicine, even amongst common species such as dogs, cats and horses, so for keyhole surgery to be carried out on a bear is a great advancement in veterinary surgery.

"This procedure was only really possible thanks to a cutting-edge designed retractor designed by Leeds based designer and manufacturer of surgical devices, Surgical Innovations. As laparoscopic cholecystectomy has never been performed on bears before, I hope this experience helps raise its profile and encourage more veterinary surgeons to look into it as a standard surgical procedure."

A huge leap forward in terms of animal welfare, the minimally invasive nature of laparoscopic surgery means there are numerous benefits for animals such as a reduction in post-operative pain, a faster recovery and reduced post-operative care. It also has a decreased risk of infection after surgery and a lower risk of any wound complications.