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Mid-Sea Amputation of a Russian Engineer's Hand, Successful Medical Evacuation by Indian Coastguards and Replantation in Mangalore City: 19-Year Survival

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We report an exceptionally rare incidence that happened 20 years ago involving the coordinated rescue operation and successful replantation of a foreign national's amputated hand. The patient survived the accident and lived a fruitful life and passed away recently.

A 52-year-old Russian engineer *Mr. Golovashchenko Valeriy Nikolaevich*, a crew member sailing on a Russian vessel *Anatoliy Kolesnichenko* on August 18, 2004, at about 5.30 p.m., sustained an accidental amputation through the left wrist while working on board in the mid-sea. The captain of the ship called for

Fig. 1 Amputation of the left hand through the wrist (above). Replantation (below).

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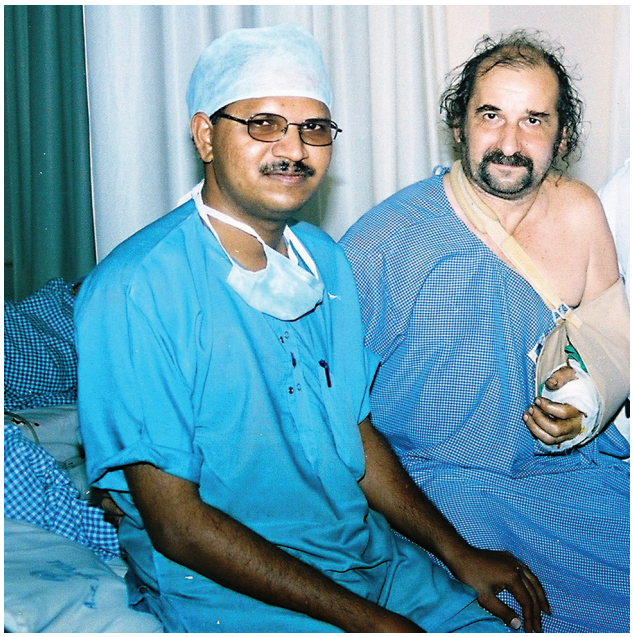

Fig. 2 During the post-op with the author.

assistance for medical evacuation. Maritime Rescue Coordination Centres (MRCCs) in Mumbai and Chennai received messages, and the vessel was directed to approach the nearest harbor, the New Mangalore Port, so as to effect evacuation by the Coast Guards. The ship was 72 nautical miles away from Mangalore, a city located on western coast of the southern Indian state Karnataka. The MRCC, New Mangalore, assumed coordination, and *C-131* was sailed for medical evacuation, as recorded and published by the Ministry of Defence, Government of India.[1] As the ship entered the inner harbor on August 19, 2004, the patient was evacuated and taken to our hospital in Mangalore on a Coast Guard ambulance at 4.30 a.m.

The amputated hand was well preserved in a cool container wrapped in polythene immersed in ice blocks. It was a sharp-cut injury at the level of the carpus with minimal crush elements (►**Fig. 1**). The patient was stable with normal vital signs. He was a known hypertensive and gave a history of cigarette smoking. Routine evaluation was done quickly and shifted for the replantation procedure under general anesthesia administered by the coauthor. The sequence of replantation included K-wire fixation to stabilize the wrist without necessitating skeletal shortening or carpectomy. After a minimal debridement, all flexor tendons and extensor tendons were repaired, followed by both radial artery, three dorsal veins, and the ulnar artery. Both ulnar and median nerve neurorrhaphy was performed, and skin was primarily approximated. The postoperative period was uneventful (►**Fig. 2**); there were no issues with vascularity or the wound cover. The lymphatic leak stopped after a week. He was discharged and flown to Russia after 3 weeks. He returned to India in January 2005 for the follow-up and tenolysis was performed to improve the range of mobility of fingers. Osteosynthesis was removed, and supportive splints were given.

Mr. Valeriy and his family were in regular communication with the authors, although he could not make any further visits to India. He lived a fruitful life by taking up a job in his hometown. He was able to do all his activities of daily living, lift weights, operate computers, drive heavy vehicles, engage in outdoor activities like snow shelving, gardening, and so on (►**Fig. 3**). His daughter regularly

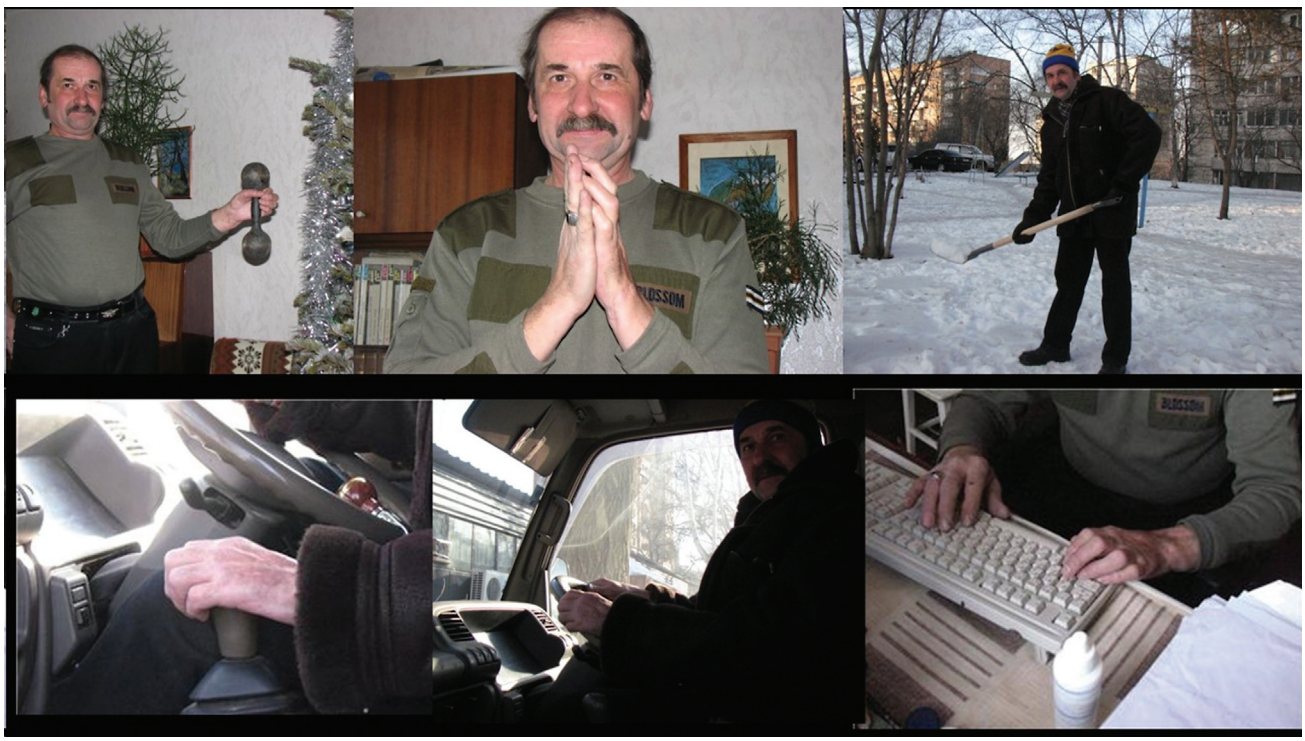

Fig. 3 Various activities of daily and independent living using the replanted left hand.

dered to the police after the murder

Russian's severed hand re-attached

TIMES NEWS NETWORK

Mangalore: The AJ Hospital here have successfully replanted the amputated palm of an electrical engineer from Russia.

According to the hospital release, Golovashenko Valeriy (52) had his left palm (near the wrist) amputated completely, while working at mid sea on August 18.

The Coast Guard brought him to the Mangalore NMPT at about 3 am. He was then rushed to the AJ Hospital.

The amputated hand was kept in ice water. Although 10 hours had elapsed since the amputation, the surgeons at the hospital did not encounter any problem attaching it, said Dr Dinesh Kadam, plastic and micro vascular surgeon, who led the operating team.

The surgery lasted 8 hours and the amputated palm was successfully reattached by micro vascular surgery. Five blood vessels, all the nerves and tendons were rejoined after fixing the bone by Dr Kadam and orthopaedic surgeon Dr Sudarshan Bhandary.

The release said the patient was recovering well and the blood circulation in the replanted hand is totally satisfactory and he is able to move his fingers. He will be kept in the hospital for at least 7 to 10 days.

The severed palm of the Russian engineer. (right) The Russian recuperates at the hospital in Mangalore on Saturday.

Fig. 4 Media coverage in newpapers.

shared his social activities and sent greetings on every Christmas day. In December 2023, we received the news of his unfortunate demise following a short course of malignancy.

This story of a foreign national with a successful outcome following a coastguard operation for medical evacuation was catchy and received national attention[2] (►**Fig. 4**). Over the years, it helped us to spread awareness about the scope of microsurgery, saving amputated limbs, and the right way of preservation while transporting. Twenty years since the incident, the hospital has become a high-volume reconstructive microsurgical center with several major replantations, including bilateral upper limb and lower limb replantations, performed regularly.[3]

Informed Consent

Consent for publication of the patient's photographs and personal details in this manuscript has been obtained from his daughter.

Conflict of Interest

None declared.

Acknowledgments

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