## First Hand: Unexploded Mortar Shell in an Upper Extremity

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▼ HE PATIENT WAS a 22-year-old Iranian combatant during the Iran-Iraq war (1980-1988). His left upper limb was hit by a 60-mm mortar shell in 1984. He sustained the injury while he was talking on a wireless communication device and holding the hearing piece of the apparatus with his left hand. Fortunately, the mortar shell did not explode, but it pierced and passed through his left forearm and arm. The head of the shell emerged over his posteromedial surface of the left arm. The fin of the shell was lodged on the dorsal surface of his forearm (Fig. 1). Five hours after the injury he arrived at a field hospital. However, when he arrived at the hospital, both his comrades and the medical professionals assigned to his case were reluctant to come close to the man for fear of an impending explosion. An immediate upper limb amputation was considered and discussed with the patient. However, the patient absolutely refused the amputation and insisted that his limb be saved.

The medical personnel complied with the man's wishes to save his limb. Because the warhead of the shell was severely damaged and crushed, the ordnance specialists were unable to neutralize the mortar shell before treatment. After the patient was anesthetized, the shell was extracted from his arm and forearm in a retrograde direction by a doctor (Fig. 2). The fractured forearm bones were repaired, and the patient recovered uneventfully.

The treatment of war wounds has been an important topic since ancient times. Usually, the patterns of injuries caused by a mortar shell explosion consist of a blast injury and multiple penetrating and perforat-

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**FIGURE 1:** The fins of the shell were lodged in the dorsal forearm.



**FIGURE 2:** The unexploded 60-mm mortar shell.

ing wounds caused by metal shrapnel fragments. However, the treatment of an unexploded mortal shell is indeed an unusual occurrence.

This case demonstrates that, by observing and applying recognized principles of war wound management, the patient recovered uneventfully.

This report brings to mind the contradictory roles of war and medicine. War often takes lives, whereas the medical field treats victims of war. However, war has a major impact on the advancement of medicine and surgery. Throughout history, wars have introduced different kinds of wounds to surgeons. Therefore, surgeons have gained invaluable experiences during war time. Hippocrates stated that "if one wants to become a surgeon, one should follow the army." He summarized that "war is the only proper school for surgeons."

The hand surgery history in the United States is an example of the paradox that good things might come from the horrors of war because hand surgery as a surgical specialty was developed during World War II.

Gunshot wounds were rarely seen in Iran before the Iran-Iraq war began in September 1980. Hand surgery was introduced to the Iranian medical community in 1971. Few Iranian hand surgeons had been trained before 1980. As a result of the war, Iranian orthopedic, plastic, and general surgeons had treated thousands of war wounds and gained invaluable experience with complex reconstruction of upper extremities, as well as peripheral nerve surgeries. Although one should never wish for war, it is important to catalogue the positive lessons that are learned even under the most trying of times, to acknowledge that crisis is an excellent teacher, and to share the unique knowledge gained from every situation with one's colleagues.

## Hands on Stamps: China 1991—Family Planning Policy

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Day of Issue: April 20, 1991

Size:  $30 \times 40 \text{ mm}$ Value: 50 Fen (cents)

China issued this stamp (Fig. 1) in 1991 to commemorate the "Family Planning Policy" enacted successfully for 9 years. As one of the 4 basic policies of the People's Republic of China, this policy associates population growth with social development. The stamp depicts a child's small hand making contact with his or her parent's large hand, representing the happy life of the family. It reads, "To improve population quality," on the top right corner.

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**FIGURE 1:** Family planning policy.