## ANNALES UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA LUBLIN – POLONIA

VOL. XLVI, 2

ı

SECTIO D

1991

Zakład Neuroradiologii i Rentgenodiagnostyki. Akadema Medyczna w Lublinie Kierownik: prof. dr hab. n. med. Stanisław Bryc

Marek ŁOSICKI

## My Service in the Gulf War

Moja praca w czasie wojny w Zatoce Perskiej

I was in the Persian Gulf during the Gulf War as a member of Polish Medical Mission. I worked in the Saudi Military Hospital in the King Khalid Military Centre (KKMC). The hospital was situated about 60 km away from Hafr Al-Baten, the city in the north of the Saudi Kingdom, and about 120 km from the Iraqi border. It was close, and I think it gave me quite a good idea about the work of radiologists on a conventional, contemporary war.

KKMC Hospital was the hospital managing for Saudi-American Company "Witicar". It was built, equipped and organized in the same way as an ordinary, full-department hospital in the USA.

Radiology department was divided into 3 parts, i.e.: Main Department, X-ray Dept. in ER (Emergency Room) and X-ray room in OR (Operation Room).

Most of our work took place in the Main Dept. There were two fluoroscopy rooms (both with the possibility of taking X-rays), basic X-ray room for taking nearly all X-rays, angiography room, conventional tomography room, USG room and CT room. Apart from that, we had reception with archives and two coffee rooms (according to the islamic rule they were separate for men and women), conference room, working area for radiologists and a single room for each of them.

In the OR we had few X-ray machines and one developer to test films instantly. Because that part of our department did not require the presence of radiographers all the time, they came back to the Main Department after all examinations.

In the ER we had two X-ray rooms with basic machines to examine bones, chests and abdomens. There were two radiographers working in the morning and four at the evening and at the night shift. The X-rays after being taken were sent to the Main Dept. for reporting.

Radiologists and radiographers worked 8 hrs a day with one hour break for lunch. Usual work-plan for doctors was the following : one of us was doing all the procedures (as USG, B. Meals and others) for one day and others were reporting X-rays which were taken earlier. This routine was changed the next day. After usual work, one of us had the duty on call from 5 p.m. to 8 a.m. the next day (one by one).

Because there were many workers from many countries who were employed in that hospital, English language was obligatory and served as a unifying factor.

Before the commencement of the war, an American general with his colonels prepared the plan for all people and all departments in the hospital. We had to be prepared for many war victims but fortunately we never used the plan because there were not too many of them. The wounded were mainly Iraqi people, most of them civilian. There were many children among them.

Since the advent of the war, diagnostic examinations were much different than those during peace time. Most of them were simple X-rays as we wanted to find fractures and foreign bodies first. Other examinations were done mainly to find traumatic changes. These were special traumatic changes which cannot be found during peace time.

We found many multiple and comminuted fractures of many bones and many metallic foreign bodies of different forms — especially from so-called "rubbish mines" with tapes, springs and other things inside. They hurt not only bones and muscles but some internal organs too (Fig. 1).

At the same time, we had many patients who were the victims of road traffic or were simply ill. Sometimes the victim of a road accident had more injuries than the victim of the war (Fig. 2).

We had many patients with fractures, injuries of internal organs, with burns and with small metallic foreign bodies in their eyes (Fig. 3).

Americans were very well prepared to that war and they had a very good, easy to use equipment. They also had lots of disposable equipment which, I hope, we could get in the future in Poland. It saves time by an X-ray examination, it is cheap, disposable, sterile and that is why it is safe for patient's health and life. I am going to present three cases:

Case 1. A patient — Iraqi doctor who was injured by an exploding mine, had his right illiac bone and both side ischiac and pubic bones fractured. Around them, there were many small metallic foreign bodies in his soft tissues. After orthopaedic treatment he had some difficulties with passing urine. We made few X-ray examinations as urography and cystography but no abnormality was detected. American urologist ordered urethrography and we found stricture of the upper part of urethra which was due to a post-traumatic change.

Case 2. It concerned a 6 years old Iraqi boy. I had to do the same examination (urethrography) which turned out to be very difficult because the boy had both legs and both hips in a plaster dressing. The examination was only possible owing to a small, single and a simple device for urethrogram (Fig. 4).



Fig. 1. Fractured both bones of a leg with Fig. 2. Comminuted fracture of a femur with foreign metallic bodies from "rubbish mine"



many bony fragments

Marek Łosicki



Fig. 3. CT scan showing metallic foreign bodies into both of eyes

Marek Łosicki



Fig. 4. Cystourethrogram showing bladder and urethra with contrast agent inside. Some metallic foreign bodies into soft tissues and fractures of pelvical bones are visible



Fig. 5. Small metallic foreign bodies on the skull X-ray (lateral view) are diagnosed

Case 3. Many times we found metallic foreign bodies in nearly all parts of human body and we had to find out in which part of the abdomen, chest or brain they were. It was only possible in CT examination. For example 22-year-old woman with many foreign metallic bodies which were shown on the X-ray of her skull. She had continuous headache and from time to time she lost her consciousness. Luckily, all that foreign bodies were in the soft tissues of the head (Fig. 5).

For all those examinations we used only non-ionic contrast mediums as Conray and Omnipaque. They were much safer than Urographin or other similar contrast agents. We used them in CT examinations as well as in ordinary urography.

Sometimes it was very difficult to find small metallic foreign bodies in the internal organs of the abdomen or chest. We had to find them somehow, because quite often they could move and if they were close to big blood vessels, patient's life could be in great danger. So, when the slice of CT Scan was 4, 6 or 8 mm and the diameter of a foreign object was about 4 mm — it was nearly impossible to find it.

Also, we had patients which simple diseases as urinary stones, gall stones, pneumonia etc. So, in fact, we had to examine not only soldiers but civilians from the Saudi Kingdom, Iraq and the United Nations too.

It was the first time I took part in the war. Before my arrival to the Saudi Kingdom I never imagined what war looked like — I knew it only from the movies. The war in the Persian Gulf was a special war nearly without victims on the side of the United Nations' Armed Forces. There were not many patients, otherwise I am not too sure we could help them all.

It was a stroke of luck that the Iraqi Army had worse equipment than the US Armies, that the war was extremely quick and that the Iraqi did not use chemical, biological or nuclear weapons. Unfortunately, they set fire to oil-shafts in Kuwait and caused big spillage of oil in the Gulf which was very dangerous for natural environment in the whole region.

It is extremely hard, if not impossible, to imagine that war with the use of nuclear or chemical weapons.

Otrzymano 1991.10.03.

## STRESZCZENIE

W czasie wojny w Zatoce Perskiej, będąc członkiem Polskiej Misji Medycznej, pracowałem jako lekarz radiolog w stacjonarnym szpitalu wojskowym w KKMC, położonym ok. 120 km na południe od granicy iracko-saudyjskiej w Arabii Saudyjskiej. Doniesienie ukazuje warunki pracy lekarza radiologa oraz 3 przypadki leczenia w warunkach konwencjonalnej wojny lądowej.