

## LETTER TO THE EDITOR

# REPORT ON AN INTERNSHIP AT THE BURNS CENTRE IN PITTSBURGH, USA

In the period between the 18<sup>th</sup> February and the 17<sup>th</sup> March, 2013, I had the opportunity of accepting an internship in The West Penn Hospital Burn Center, in Pittsburgh, Pennsylvania. During the internship, I shared in the usual medical activities including working in the ICU, standard wards, operating theatres, out-patient clinics as well as attending seminars in the Burns Centre or in the Plastic Surgery Department.

The city of Pittsburgh is located in the State of Pennsylvania, in the North-East of the USA. The inner city has about 350,000 inhabitants, but the entire metropolitan area can count almost 2.4 million residents. The city has several pseudonyms, such as

"Steel Capital of the World" and "City of Bridges." This is because Pittsburgh and the region was the largest exporter of steel in the world during past decades. The second epithet for the city is derived from the record number of 446 bridges. The vast majority of them span the three rivers that flow through the city - Allegheny, Ohio and Monongahela. Pittsburgh is much like Hradec Králové in that the town-centre is located right in the middle of a two-river confluence. Another similarity with Hradec Králové is the relatively high number of students in the city. Pittsburgh established three universities and two medical schools. Another interesting thing for me was the fact that Pittsburgh is twinned with my hometown of Prešov in Slovakia.



**Figure 1.** The West Penn Hospital and its Burns Centre on the second floor.

I was able to enjoy this Fellowship thanks to the "We remember Elvis Aaron Presley" Foundation which fully covered my expenses. The Foundation was established in 1989 and, since that time, it has supported the travel-costs for a number of trainees from all over the world in an amount of 90,000 USD. The internship is usually granted to 1-2 fellows per year. It goes most often to young doctors with an interest in burns-medicine, nurses or other medical staff. We are reminded that the Elvis Aaron Presley Foundation was founded by people from the era of Elvis Presley pop-music superstar; these loyal fans commemorate through this method his precepts of medicine and the treatment of trauma-patients in particular. In addition to this work, the Foundation makes financial donations and, every year, organizes summer-camps for burned children.

The Burns Centre itself is located at the West Penn Allegheny Hospital, which is a part of the 5 hospitals forming the West Penn Allegheny Health System. In 2012, the company employed a total of 11,423 employees of whom 1,695 were doctors who had completed their training, 457 residents and 3,000 trained nurses. In 2012, 55,982 in-patients and 802,015 out-

patients were treated. The Hospital budget for that year was 1.6 billion USD; donations from private sources accounted for nearly 4 million USD.

The Burns Centre has 2 permanent, fully-trained doctors and averages 2-3 residents and 1-3 medical students. The capacity of the Centre is 9 standard beds and 5 intensive-care beds. Last year, 343 patients were hospitalized and 1,500 were treated as out-patients. In 2012, a total of 230 operations was performed. The most common procedure is tangential early necrectomy with autotransplantation of split-thickness skin-graft performed at the same time, most often during the 1<sup>st</sup> or 2<sup>nd</sup> post-traumatic day. An interesting finding for me was the large difference in the cost of the operation. Compared with the Czech Republic, it is approximately 5 times higher. Access to modern technologies is probably one of the reasons for this. It increases the cost of the operation but, on the other hand, enables faster recovery of the patient, a shorter hospital-stay, and reduces the level of out-patient monitoring. For debridement, a water-jet device removes the dead tissue; for hemostasis, thrombin is used; and for fixation of skin-grafts, fibrin-glue is applied.



**Figure 2.** Members of the Foundation and Head of the Burns Centre Dr. Ariel Aballay (second from left).



During my periods in the operating-theatre and afterwards, I had the opportunity of discussing various topics with burns-medicine experts; with Ariel Aballay, MD, FACS, who is the Head of the Centre, and a former military surgeon, consultant Robert Kelly, MD. Both of them are active members of the American Burns Association. With great interest we discussed procedures and methods that we use in our country as well. Due to their awareness of the very good level of medicine in the Czech Republic, they sometimes asked for my opinion on the treatment or procedures that we would use in our department. During my stay there, my colleagues successfully tested the use of vacuum-therapy in skin-grafting, with which we had already had very good experience.

In the operating-theatres, personnel do not go through the filter, as we do. Clothes that doctors wear in the theatres are the same as they use on the ward, or even the same as when they go for lunch at a local restaurant. A big surprise was the absence of special shoes for the operating-theatres; they routinely operate in shoes, the same as those used by the staff on the wards or on the way to work. Observer-interest is further quickened when noting the emphasis put on eye-protection, with surgeons using either operating-glasses or special masks to shield their faces.

Rounds took place on the wards every day during breaks between operations. Residents, medical students and surgical assistants learn all about the patients. Each participant was given printed documents on which basic information about the patients was explained. During the rounds, a laptop is normally used for accurate interpretation of the test-results. The crucial part of communication and information-exchange during rounds took place outside the patient's room. At the bedside, only a general discussion took place with the patient; the emphasis was put on answering a number of questions that patients and their family-members commonly have for the consultant. Nurses are always involved and they are on hand to deal with any affiliated issues. The whole ward-situation is later discussed, and some topics would often find their way into seminars which are held at least once a-week. At one of the seminars, I had the opportunity of presenting a short lecture in which I spoke about the burns care-system in the Czech Republic. This was well-appreciated, and I answered some subsequent interesting questions.

The entire internship took place in a very pleasant and friendly atmosphere. Towards the end of my stay, I was accepted as an Honorary Member of the local "Humby Association", and I was given the badge with one of the most important tools for a burns-surgeon – the Humby knife. During my stay in the Burns Centre in Pittsburgh, I gained considerable knowledge, and was re-assured by the fact that in the Czech Republic and Hradec Králové, we perform medicine at a level fully comparable with the most-developed countries of the world. This internship also allowed me to make new professional contacts with excellent potential for further co-operation.



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