



# **Chapter 5 – RECOMMENDATIONS**

### 5.1 PLANNING

On NATO level, Nations usually either perform planning and Airevac operations with their own means and assets, or collaborate in a more or less structured way with partner Nations for "burden sharing". This can be only for a specific mission or on a more permanent basis. An example is the AECC (Aeromedical Evacuation Control Centre) set up within EATC (European Air Transport Command), a multi-national command (Netherlands, Belgium, France, Germany and Luxemburg) established in 2010 with the goal of providing a single headquarters for air transport, air-to-air refueling and aeromedical evacuation, thus setting an example of successful military pooling and sharing in Europe. Within EATC, the AECC is capable of planning and executing medical evacuations is a fast and efficient way. Within the participating Nations, a PECC (Patient Evacuation Control Centre) is both at the "requesting end" and at the "receiving end" of the patient evacuation chain, with AECC organizing the most efficient means and schedule of transport.

Whether the contingency plan for medical evacuation is established through EATC/AECC or independently by individual NATO Nations, preliminary contacts should be made between the (military or civilian) HBO centers and the military Medevac Planner.

As "emergency transfer for HBO" needs to be considered a "primary" emergency, this should possibly be included in existing NATO agreements between partners.

As the medical-surgical and HBO capabilities of a HBO Centre and/or its associated hospital may change, a systematic yearly renewal of the agreement must be provided for. The agreement should include costs for hospitalization and HBO treatment, and must include an obligation to report back to the recognized military HBO expert of the patient's Nation.

## 5.2 ROUTING

For each military operation where any NATO Nation sends troops, and by extension for each NATO Nation over whose territory possible Medevac of any other NATO Nations' military personnel might take place, it is recommended that evacuation route(s) be established to the selected/appropriate HBO Centers. The responsibility for establishing these routes lies with the Patient Evacuation Coordination Centre (PECC) of each (potential) patient's Nation if such a PECC exists. Alternatively, the coordinating Nation may prospectively establish the shortest (fastest) route and most appropriate transport means from the receiving airfield to the HBO Centre. In Annex C, the current military HBO experts from most European Nations are listed, as a reference. This list needs annual updating.

Other resources available to PECC or equivalent include the following websites:

- www.echm.org
- www.uhms.org
- www.eubs.org
- www.oxynet.org

#### 5.3 PRACTICAL ISSUES TO BE RESOLVED

#### **5.3.1** Evacuation Routing

As availability of civilian and military HBO centres and their associated hospitals may vary in time, no fixed routes can be proposed. For each military operation theatre, these routes need to be prepared and

STO-TR-HFM-192 5 - 1



reconnoitred case by case. However, once a suitable HBO facility has been identified, organizing this routing should, in Western countries, not pose significant problems.

#### **5.3.2** Financial Agreements

Existing financial agreements between NATO Nations' Defence Departments and civilian health care institutions should encompass the emergency HBO care of wounded military personnel, as they would emergency neurosurgery or burn wound care.

The responsibility for these financial agreements should thus be transferred from the Medevac planners to each nation's Defence Department. However, in the process of planning, it is recommended to negotiate a fixed day-price for medical care, including HBO therapy, beforehand. In the current context of civilian health care financing, most civilian hospitals would not oppose such an "a priori" agreement.

## 5.3.3 Evaluation of Efficacy

As for most of the "accepted HBO indications", the scientific Level Of Evidence (LOE) can still be improved, it is recommended that a systematic data collection be undertaken for each treated case. In cases where no HBO can be administered, ideally the same information should be collected in order to ultimately permit a post-hoc analysis of efficacy of treatment. While this cannot replace a true randomized controlled prospective trial, it is acknowledged that in the specific military context with multi-national – multi-theatre patients, such trials are unrealistic.

#### 5.4 PROPOSAL FOR LECTURE SERIES

#### 5.4.1 Objectives

It is apparent that in almost none of the Western countries, academic medical education in the rationale, the effects and the indications for HBO therapy exist. This implies that, unless specific medical post-graduate training is or has been accomplished, military healthcare personnel (with medical doctors as an example) have had no or very little theoretical knowledge of the possibilities and benefits of HBO therapy for the wounded under their care.

Furthermore, the indications for HBO therapy depend largely on a "cost-benefit" or "risk-benefit" evaluation, and civilian "rules and guidelines" cannot be extrapolated simply to the military operational medical setting.

Therefore, this RTG proposes the setting up and conduction of a Lecture Series, aimed at NATO military medical officers, in order to gain a proper basic knowledge and applicability of HBO therapy in the context outlined above.

### 5.4.2 Proposal

A STO Lecture Series (LS) is proposed, where in a two day program, essential principles of pathophysiology and therapeutic rationale of HBO therapy will be taught. The LS will be held on three occasions over a two-year period, within the framework and with the support of STO.

Lecturers will be chosen so as not only to be able to provide expert medical knowledge, but also to "make the link" with the specific military situations and "cost/risk-benefit" evaluations encountered in this field.

A certificate of attendance will be issued upon completion of the course – however, the LS in itself does not substitute for proper academic training.

5 - 2 STO-TR-HFM-192