

Staff

Erik C. Jansen, MD, DMSc is Director of the Hyperbaric Chamber.

The Hyperbaric Chamber cooperates with Hyperbaric Consult, an engineering enterprise which provides technical assistance and maintains the chamber.

Two persons operate the chamber: one watches the control panel, and one is ready to talk to the patients inside the chamber if any problem arises. If necessary, this person can enter the chamber during the treatment.

During daytime the following persons are present:

- 1 specialist in anaesthesiology and intensive care
- 2 technicians who are professional divers from Hyperbaric Consult
- 1 nurse



Research

Primary research interests are:

- Monitoring the effects of therapy after radiation injury
- Diagnosis, treatment and follow-up of patients with decompression sickness and carbon monoxide poisoning
- Cyanide poisoning
- Hyperbaric oxygenation for treatment of necrotising soft tissue infections

Several clinical research fellows and medical students are carrying out projects connected with the hyperbaric chamber.

Laboratory for Hyperbaric Medicine has two small hyperbaric chambers for experimental studies. Ole Hyldegaard, MD, Ph.D., is the leader of the laboratory.



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The Hyperbaric Chamber

Rigshospitalet



Department of Anaesthesia
Centre of Head and Orthopaedics
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Treatments

HyperBaric Oxygenation (HBO) is offered for treatment of various types of diseases:

Day cases:

- Radiation injury after successful treatment of cancer
- Treatment of wounds and fractures with healing failure
- Treatment of diabetic lesions

Emergency cases:

- Decompression sickness
- Carbon monoxide poisoning
- Treatment of necrotising soft tissue infections

Day cases are given typically one daily HBO session in a series of 30 HBO treatments.

Conditions demanding immediate treatment with HBO can be started at any time of the day at one hour's notice. This type of treatment typically demands few sessions in the hyperbaric chamber.

Rigshospitalet has treated patients in a hyperbaric chamber for many years, but until 1998 this was done in a mono chamber (see photo).



The Gad Andresen Foundation made it possible to acquire the present Drass Galeazzi chamber.

The chamber is a multiplace one, consisting of a main chamber with 7 seats and an entry chamber with 2 seats. If needed, the hyperbaric chamber can be converted into an intensive care room, where patients can be treated with a respirator and other therapeutic devices during the HBO treatment.



The pressure in the chamber is generated from a compressor placed in a room next to the chamber. The HBO treatment is computer controlled, but can be operated manually. The chamber can be operated with pressure above as well as below the atmospheric pressure. A pressure equivalent to 50 meters sea water can be generated.

Day cases are given a pressure equivalent to a dive to 14 meters. Emergency cases are given a pressure equivalent to a dive to 18 meters.

The patients are breathing pure oxygen. Each HBO session last about 100 minutes.



The chamber is video monitored, all treatments are video recorded. An intercom is connected to the guard outside the chamber, so patients can communicate with the personnel during treatment. It is possible to read during treatment.



Safety is extremely high. Every morning before the start of treatments, a list of 170 items is checked. All patients must wear cotton clothes to avoid static electricity.

Activities

The number of treatments in the hyperbaric chamber has increased considerably through the years, and documentation of the results is improving.

Total of patients treated

