



# โรงพยาบาลสมเด็จพระปิ่นเกล้า Somdech Phra Pinklao Hospital



“Center of Hyperbaric  
Medicine”,  
Somdech Phra Pinklao  
Hospital, Naval  
Medical Department,  
established in 2015





# Center of Hyperbaric Medicine

## Vision

- To be a quality institute of excellence in underwater and hyperbaric medicine of the region





# Center of Hyperbaric Medicine

## Mission

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- Provide hyperbaric treatment and appropriate medical care for patients with **diving-related illness and injuries**.
- Provide treatment for patients that need hyperbaric oxygen therapy for their **related illnesses**.
- Implementation of **safety measures** on hyperbaric medicine.
- Establish **education and training** in hyperbaric medicine.
- Support **research** in hyperbaric medicine.



# Center of Hyperbaric Medicine

## Goals

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- Building quality patient care and trusted safety standards
- Building a complete management system
- Emphasize on academic development in hyperbaric medicine and clinical care





# Center of Hyperbaric Medicine Clinical Services



- 3 compartment chambers for diving cases and non-diving cases: UHMS indications
- Provide critical patient care
- 24 hours available for emergency cases: 4 Fast tracks
  - **DCS, CAGE, CO poisoning, CRAO**



# Center of Hyperbaric Medicine Clinical Services

## Routine Patient Care

- 3 sessions/ day
- Main lock usage
- 12 patients + 1 inside tender
- Average waiting list:  
2 weeks – 1 month
- 2 breathing device options:
  - Face mask
  - Hood
- Patient education before and after treatment
- Wound care and assessment







# Center of Hyperbaric Medicine Clinical Services



## Critical Patient Care

- Ventilated critical patients could be treated in the critical lock
- 1 patient with 2 nurses (RN)
- Patients monitoring by the diving medical officer from control room



# Center of Hyperbaric Medicine Clinical Services

## **Emergency Patient Care: Fast 4 Life Project**

- initiated in 2016
- Facilitate the emergency patients who need HBOT to the unit as soon as possible.
- Includes 4 acute indications;
  - Decompression sickness
  - Cerebral arterial gas embolism
  - Carbon monoxide poisoning
  - Central retinal arterial occlusion
- The transfer goals between the hospital's emergency room to HBO unit is 60 minutes for DCS cases and 45 minutes for arterial gas embolism cases
- After 2 years, the outcome achieved 100 % for DCS cases and 96.77 % for arterial gas embolism cases.
- Collaborated medical staff include diving medical officer, emergency physician, internist, and ophthalmologist.





# Center of Hyperbaric Medicine

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# Center of Hyperbaric Medicine

## Academic Services

- **Basic course in hyperbaric medicine**
  - 5 days
  - For Medical Professions: doctors, nurses, medical officers
- **Critical care in hyperbaric chamber for nurses**
  - 2 days of lectures and demonstration
- **Elective course for doctors**
  - 2 weeks
  - Emergency physician, occupational medicine physician, travelling medicine physician, medical students
- **Maritime medicine Residency training**
  - 3 years courses for post grad doctors
  - Involved in the part of clinical hyperbaric and underwater medicine



# Center of Hyperbaric Medicine Research

## Recent:

- Treatment Outcome of Central Retinal Artery Occlusion with Hyperbaric Oxygen Therapy in Somdech Phra Pinklao Hospital, Department of Naval Medicine, Chulalongkorn Medical Journal
- Lung function change in hyperbaric chamber inside attendants, IMH 2019;70(2):125-131.
- Descriptive study of decompression illness in a hyperbaric medicine centre in Bangkok, Thailand from 2015 to 2021. Diving and Hyperbaric Medicine, 52(4), 277-280. <https://doi.org/10.28920/dhm52.4.277-280>
- Effect of Hyperbaric Oxygen Therapy on Erectile Function at Somdech Phra Pinklao Hospital, Royal Thai Navy Medical Journal

## Processing:

- Outcome of Fast tract protocol for emergency hyperbaric oxygen treatment in Somdech Phra Pinklao Hospital





**Thank you for your attention**

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