



International Hypothermia Registry



International Hypothermia Registry



1. Need for a registry
2. Aim
3. Method
4. Expectations





1. NEED FOR A REGISTRY

- « Survival after accidental deep hypothermia and prolonged cardiac arrest is **rare**...however, long term survival rates without sequelae of **47%** is higher than previously reported » ***NEJM Walpoth et al 1997***
- No consensus national/international guidelines for hypothermia treatment
- Insufficient medical literature, no case reports on negative outcomes





2. AIMS

- Create a database on accidental hypothermia to:
 - Study pre-hospital treatments and their impact on outcome
 - Increase our knowledge on impact and complications of rewarming techniques.
 - Prevent and decrease severity of post-rewarming complications (i.e. lung and brain oedema)







3. Method

- Internet-based English survey, protected anonymous data
- Eligibility: all interested hospitals/rescue centres
- Includes:
 - victims with core body $T^{\circ} < 32^{\circ}\text{C}$, preference for $T^{\circ} < 28^{\circ}\text{C}$ with cardiac arrest.
 - accidental hypothermia of any origin (exposure/avalanche/immersion/suicide attempt...)
- Registry components:
 - Anonymous patient data
 - Accident data
 - Prehospital treatment
 - Hospital treatment, rewarming method, clinical and laboratory data
 - Post-rewarming complications
 - Outcome
- Data access and publication possible for your own cases
- Global data analysis by nominated international working group
- Quality control reports on a yearly basis





International Hypothermia Registry
IHR
IHR Prehospitalisation

Philippe Baumann connected since 09:10 until 10:11
IHR local data manager / center of Geneva
Patient: PATIENT 17 Patient 17 (M) N°: 80000342
Stored consent:

Accident Features Medical Features

Accident Features

Accident Date: 07/09/2009 Accident Time: Hours 3 Minutes 24

Type of accident: Water Alpine Urban/Rural

Water

Context of accident (water): Immersion Submersion

Temperature (water) known: Unknown Known Température (water) [C°]

Time in water (water): Unknown Known Time in water: Days -- Hours -- Minutes --

Rescue

Rescue on site by Companions/Self: First on site Second on site



Rescue on site by Paramedics: First on site Second on site

Rescue on site by Physician: First on site Second on site Name [] Organization [] City []

Medicated rescue arrival date: 23/09/2009 Hours 19 Minutes 27

Interval between accident and rescue 16 (days) 16 (hours) 3 (minutes)





International Hypothermia Registry
IHR
IHR Hospitalisation

Save Save and Close Cancel

Philippe Baumann connected since 09:10 until 10:14
IHR local data manager / center of Geneva
Patient: PATIENT 17 Patient 17 (M) N°: 80000342
Stored consent Patient consent given

Pre-rewarming management of the patient | Data on rewarming | Intensive Care after Rewarming | Comments

Arrival time at rewarming hospital
Arrival time at rewarming hospital Date: [] Hours: [] Minutes: []

Neurologic evaluation
Arrival hospital Glasgow -- Possible Impossible **Glasgow score : O: 2 V: 3 M: 3 --Tot: 8**
Global Glasgow Score []
Eye opening -- None To pain To speech Spontaneous
Verbal response -- None Incomprehensible Inappropriate Confused Oriented
Motor response -- None Extension Flexor response Withdrawal from pain Localizes pain Obeys commands

Left pupil		Right pupil	
Reactive to light	<input checked="" type="radio"/> -- <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	Reactive to light	<input checked="" type="radio"/> -- <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
Size	<input checked="" type="radio"/> -- <input type="radio"/> Normal <input type="radio"/> Mydriasis <input type="radio"/> Miosis <input type="radio"/> Unknown	Size	<input checked="" type="radio"/> -- <input type="radio"/> Normal <input type="radio"/> Mydriasis <input type="radio"/> Miosis <input type="radio"/> Unknown

Core T° determined at hospital admission
Core T° -- Unknown Known
Shivering present -- Yes No

ECG
ECG recordings []

Circulation
Defibrillation -- Yes No Unknown
Cardiovascular arrest -- Yes No Unknown
Systolic blood pressure [] [mmHg] Diastolic blood pressure [] [mmHg] Heart rate [] [/min]

Major concomitant trauma	Major concomitant disease	Major concomitant intoxication
<input checked="" type="radio"/> -- <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	<input checked="" type="radio"/> -- <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown	<input checked="" type="radio"/> -- <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown

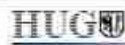
Drug administration
Drug administration -- Yes No Unknown

Drug	Dose	Unit	How many times	Drug response	Other drug
General anaesthetics: narcotics or sedatives	123	mg	4	Yes	


Fluid replacement
Fluid replacement -- Yes No Unknown
Fluid replacement volume [] [ml] Warmed -- Yes No Unknown Temperature [] [C°]

Airway rewarming
Airway rewarming -- Yes No Unknown





International Hypothermia Registry
IHR
IHR Outcome



Philippe Baumann connected since 09:10 until 10:14

IHR local data manager / center of Geneva

Patient: **PATIENT 17** Patient 17 (M) N°: 20000342

Stored consent: Patient consent given

Outcome at 1 year

Comments

Outcome assesement date

Outcome assessment date:

Consent status

Patient's consent given: -- Yes No Patient consent given

Time spent in hospital/rehabilitation after ICU

Time spent in hospital/rehabilitation after ICU: -- Yes No Unknown

Alive after 1 year

Alive after 1 year: -- Yes No Unknown

Neurologic evaluation

Outcome Glasgow: -- Unknown Known Glasgow score : O: 0 V: 0 M: 0 --Tot: 0

Long term complications

Neurological - CNS long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Neurological - PNS long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Cardiac long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Pulmonary long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Digestive long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Renal long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Metabolic long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Musculoskeletal long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable
Other long term complications	<input checked="" type="radio"/> -- <input type="radio"/> Had none <input type="radio"/> Improvement <input type="radio"/> Stable <input type="radio"/> Deterioration <input type="radio"/> Unavailable



4. Expectations

- International awareness on hypothermia, its treatment and outcome
- Wide international participation for at least 10 years
- Multicentre quality control
- Creation of international consensus guidelines for:
 - prehospital management
 - rewarming
 - post rewarming management

Thank you for your interest and participation

