



CD

SARRRAH patient number:

Rescue-Record: Part CD (hospital)

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Please make sure, that the SARRRAH - Hotline has been informed. This is the only way to assure that all pre-clinical information will be obtained on time. When the SARRRAH - physician calls back a SARRRAH-patient-number will be assigned. Please fax this form to:

In case that further documentation is necessary please use an additional sheet of paper. The project coordinator will contact rescuers and helpers for details via telephone. All information will be handled strictly confidential. Names and telephone numbers will not be stored in the electronic data bank.

The **form CD** should be used to document the medical treatment from the hospital admission to the completion of the rewarming procedure. In case the core temperature on admission to the hospital lies above 32°C, please document the clinical condition of the patient and lab parameters for 2 time points: 1. On hospital admission. 2. When a core temperature of 36°C (T17) has been reached (see pages 2 and 7).

In case the core temperature on admission to the hospital lies below 32°C, please document the clinical condition of the patient and lab parameters for 3 time points: 1. On hospital admission, 2. When a core temperature of 33°C (T14) has been reached. 3. When a core temperature above 36°C (T17) has been reached (see pages 2, 6 and 7).

Once the rewarming is complete and all lab values are available please make sure to send the complete medical records incl. lab values and additional documentation to the SARRRAH study centre. For the day of discharge the separate form E should be used.

Thank you very much for your support and cooperation.

date of admission:

DD	MM	YY			

patient-ID:

within hospital

hospital: _____ **telephone:** _____ **fax:** _____

ward: _____

attending doctors: 1. _____ **telephone:** _____

2. _____ **telephone:** _____

e-mail: _____

transfer from (name/call sign of ambulance, boat, helicopter): _____/_____/_____ **base:** _____

emergency doctor: _____ **phone contact number:** _____

location of accident/incident: _____

Time of arrival

		:		
HH			MM	

at time of arrival on-going resuscitation yes no

ventilation: _____ min⁻¹ **minute ventilation:** _____ l·min⁻¹

CPR: _____ min⁻¹

comments about medical steps:

ESTIMATION OF THE ADMITTING DOCTOR

pre-clinical **afterdrop***? yes no unknown

with complications: yes no

*further decrease of body temperature after patient was removed from cold surroundings

pre-clinical **afterfall****? yes no unknown

with complications: yes no

**synonym: rescue collapse, circum-rescue collapse, postimmersion collapse

pre-existing diseases/risk factors: _____

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TIME OF PHYSICAL CHECK:

HH		:	MM	

eyes open				
spontaneous	4			
to speech	3			
to pain	2			
absent	1			
verbal:				
converses				
orientated	5			
disorientated	4			
inappropriate	3			
incomprehensive	2			
absent	1			
motor:				
follows command	6			
localizes pain	5			
withdraws (flexion)	4			
decorticate (flexion) rigidity	3			
decerebrate (extension) rigidity	2			
absent	1			

narcotised/sedated	<input type="radio"/>
orientated	<input type="radio"/>
dizzy	<input type="radio"/>
conscious	<input type="radio"/>

pupils:	re	li
constricted/middle	<input type="radio"/>	<input type="radio"/>
dilated	<input type="radio"/>	<input type="radio"/>
derounded	<input type="radio"/>	<input type="radio"/>
no light reflex	<input type="radio"/>	<input type="radio"/>

RR / HR regular yes
 carotid pulse yes no respiratory rate no

ECG-monitor

<input type="radio"/> Sinus rhythm	<input type="radio"/> ventricular flutter/fibrillation
<input type="radio"/> continuous arrhythmia	<input type="radio"/> electromechanical dissociation
<input type="radio"/> AV-block II°	<input type="radio"/> asystole
<input type="radio"/> AV-block III°	<input type="radio"/> pacemaker rhythm
<input type="radio"/> _____	<input type="radio"/> none

extrasystole SVES VES monomorph polymorph

respiration:

<input type="radio"/> normal	<input type="radio"/> moist rales	<input type="radio"/> apnoea
<input type="radio"/> dyspnoea	<input type="radio"/> stridor	<input type="radio"/> gasping
<input type="radio"/> cyanosis	<input type="radio"/> sibilant rhonchi	<input type="radio"/> ventilation/tube

score

Admission-Lab

Hb	<input type="text"/>	g/l	CK	<input type="text"/>	u/l	GOT	<input type="text"/>	u/l
Hct	<input type="text"/>	l/l	CK-MB	<input type="text"/>	u/l	GPT	<input type="text"/>	u/l
WCC	<input type="text"/>	1/nl	LDH	<input type="text"/>	u/l	GGT	<input type="text"/>	u/l
thrombo	<input type="text"/>	1/nl	Crea	<input type="text"/>	mmol/l	lipase	<input type="text"/>	u/l
PT	<input type="text"/>	%	Na	<input type="text"/>	mmol/l	amylase	<input type="text"/>	u/l
PTT	<input type="text"/>	s	K	<input type="text"/>	mmol/l	myo-globin	<input type="text"/>	mmol/l
TT	<input type="text"/>	s	Ca	<input type="text"/>	mmol/l	lactate	<input type="text"/>	mmol/l
fibrinog.	<input type="text"/>	g/l	albumin	<input type="text"/>	g/l	plasma-viscosity	<input type="text"/>	Pa*s
AT III	<input type="text"/>	%	CHE	<input type="text"/>	kJ/l	osmo-lality	<input type="text"/>	mos mol/l
glucose	<input type="text"/>	mg/dl	bilirubin	<input type="text"/>	µmol/l	CRP	<input type="text"/>	mg/l

Blood Gases (electrodes at 37°C):

pHa	<input type="text"/>	pO _{2a}	<input type="text"/>	mmHg	SO _{2a}	<input type="text"/>	%
pCO _{2a}	<input type="text"/>	mmHg	BE	<input type="text"/>			

Ventilation:

oxygen	<input type="text"/>	l/l	PEEP	<input type="text"/>	mbar	VT	<input type="text"/>	ml
MV	<input type="text"/>	l/min	RR	<input type="text"/>	1/min			

Central Venous Pressure

CVP mmHg

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male female
 age _____ approx. weight _____ kg approx. height _____ cm

clear signs of death no yes which _____

shivering: no yes

Measurement of body temperature at:

		:		
HH			MM	

_____ °C <input type="radio"/> rectal	_____ °C <input type="radio"/> oesophagus	_____ °C <input type="radio"/> ear drum	_____ °C <input type="radio"/> vesical	_____ °C <input type="radio"/> central vein
--	--	--	---	--

12-channel-ECG

before rewarming

- | | | | |
|--|---|--|--|
| <input type="radio"/> sinus rhythm | <input type="radio"/> SVES | <input type="radio"/> AV-Block °II | <input type="radio"/> osborne waves |
| <input type="radio"/> AV-rhythm | <input type="radio"/> burst | <input type="radio"/> AV-Block °III | <input type="radio"/> repol. like in CHD |
| <input type="radio"/> ventricular rhythm | <input type="radio"/> ventr. flutter | <input type="radio"/> RBBB | <input type="radio"/> acute ischaemia |
| <input type="radio"/> regular | <input type="radio"/> ventr. fibrillation | <input type="radio"/> LBBB | |
| <input type="radio"/> arrythmia | <input type="radio"/> AV-Block °I | <input type="radio"/> singsns of myocardial infarction | |

Chest x-ray

- | | | | |
|---|---|---|----------------------------------|
| <input type="radio"/> normal | <input type="radio"/> pneumothorax | <input type="radio"/> unilateral | <input type="radio"/> bilateral |
| | <input type="radio"/> infiltration | <input type="radio"/> diffuse | <input type="radio"/> cirumsript |
| <input type="radio"/> central congestion | <input type="radio"/> central and peripheral congestion | <input type="radio"/> pulmonary oedema | |
| <input type="radio"/> spotty opacities | <input type="radio"/> pleural effusion | | |
| <input type="radio"/> moderate cardiomegaly | <input type="radio"/> massive cardiomegaly | <input type="radio"/> widening of mediastinum | |

Injuries caused by accident, description _____

Resuscitation-Injuries

(multiple nominations possible)

- | | | |
|--|--|---|
| <input type="radio"/> no resuscitation injuries | <input type="radio"/> _____ rip fractures left | <input type="radio"/> _____ rip fractures right |
| <input type="radio"/> pericardial injuries | <input type="radio"/> lung injury | <input type="radio"/> injury of upper airways |
| <input type="radio"/> injuries of abdominal organs | details: _____ | |

ESTIMATION:

hypothermia is the main problem yes no

STEPS:

tracheal suction: no little much very much

liquid viscous sanguineous soiled (aspiration)

CPR started (continued) at

minute ventilation: _____ l·min⁻¹ CPR _____ min⁻¹

		:		
HH			MM	

suction device: (ACD-CPR)

no yes which _____

With inspiratory impedance threshold valve (f.i. ResQ-POD™): yes no

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- central venous line
 arterial cannula
 oxygen insufflation _____ l/min oxygen demand system manual ventilation
 ventilator: MV _____, RR _____, PEEP _____, O₂ _____,

Intubation at:

		:		
HH			MM	

Rewarming:

- only passive
 forced warm air only trunk trunk and limbs whole body incl. head
 warm moistured inhalation _____ °C
 warm gastric lavage peritoneal lavage mediastinal lavage
 haemodialysis/filtration ECC femoro-femoral ECC via sternotomy
 other procedure: _____

comments about medical steps:

Temperature-time-course

Please record points of time and measured temperature values into the proper fields.

Measured:

- rectal
 oesophagus
 ear drum
 vesical
 central vein/
pulmonary artery

T₁ : 20, __ °C	T₂ : 21, __ °C	T₃ : 22, __ °C	T₄ : 23, __ °C
HH: MM	HH: MM	HH: MM	HH: MM
T₅ : 24, __ °C	T₆ : 25, __ °C	T₇ : 26, __ °C	T₈ : 27, __ °C
HH: MM	HH: MM	HH: MM	HH: MM
T₉ : 28, __ °C	T₁₀ : 29, __ °C	T₁₁ : 30, __ °C	T₁₂ : 31, __ °C
HH: MM	HH: MM	HH: MM	HH: MM
T₁₃ : 32, __ °C	T₁₄* : 33, __ °C	T₁₅ : 34, __ °C	T₁₆ : 35, __ °C
HH: MM	HH: MM	HH: MM	HH: MM
T₁₇▼ : 36, __ °C	T₁₈ : 37, __ °C		
HH: MM	HH: MM		

* = Status page 6

▼ = Status page 7

active rewarming until T

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Change of the Rewarming-Procedure

at point of time **T** to

only passive

forced warm air

only trunk

trunk and limbs

whole body incl. head

warm moistured inhalation _____ °C

warm gastric lavage

peritoneal lavage

mediastinal lavage

haemodialysis/filtration

ECC femoro-femoral

ECC via sternotomy

other procedures: _____

number of defibrillations: _____, for the last time at **T** energy _____ J

cardiac compression (CPR) until:

T

circulation stabilized from: **T**

shivering from:

T

until **T**

maximum core temperature within 24 hours of completion of the active rewarming procedure: _____ °C

was an active cooling-down necessary during this period of time? no yes

drugs during rewarming no yes preparation and dose:

_____ mg _____ mg _____ mg

_____ mg _____ mg _____ mg

_____ mg _____ mg _____ mg

Complications

(Points of time from page 4)

T ventricular fibrillation without known reason during transportation activities during intubation
 during other manipulation

T ventricular flutter without known reason during transportation activities during intubation
 during other manipulation

T arrhythmia

ARDS

DIC

T ventr. extrasystoles

aspiration

sepsis/SIRS

T cardiovascular failure

respiratory arrest

liver failure

T circulatory arrest

airway injuries

temp. adrenocortical insufficiency

T hypovol. shock

confusion

kidney failure

T myocardial infarction

cerebral ischaemia

rib fracture

T pulmonary oedema

embolic apoplexy

hyperthermia

T convulsion

other central neurol. disturbances

treatment terminated/deceased

haemolysis

thrombosis

Summation from the start until the end of rewarming:

urine: _____ ml, crystalloids _____ ml, colloids _____ ml

number of FFP _____ number of packed blood cells _____ number of packed platelets: _____

handing over date:

DD	MM			YY	

at:

HH	:	MM	

to:

ward

ICU

forensic medicine

pathologie

name of ward/institution: _____

at _____

telephone: _____ Dr. _____

e-mail _____

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Use this page only if the body core temperature of the patient on admission to the hospital was below 32°C.

STATUS TIME

T₁₄ (33, ___ °C)

T₁₄

eyes open		
spontaneous	4	
to speech	3	
to pain	2	
absent	1	
verbal:		
converses		
orientated	5	
disorientated	4	
inappropriate	3	
incomprehensive	2	
absent	1	
motor:		
follows command	6	
localizes pain	5	
withdraws (flexion)	4	
decorticate (flexion) rigidity	3	
decerebrate (extension) rigidity	2	
absent	1	

narcotised/sedated	<input type="radio"/>
orientated	<input type="radio"/>
dizzy	<input type="radio"/>
conscious	<input type="radio"/>

pupils:	re	li
constricted/middle	<input type="radio"/>	<input type="radio"/>
dilated	<input type="radio"/>	<input type="radio"/>
derounded	<input type="radio"/>	<input type="radio"/>
no light reflex	<input type="radio"/>	<input type="radio"/>

RR / HR regular yes
 carotid pulse yes no respiratory rate no

ECG-monitor

<input type="radio"/> Sinus rhythm	<input type="radio"/> ventricular flutter/fibrillation
<input type="radio"/> continuous arrhythmia	<input type="radio"/> electromechanical dissociation
<input type="radio"/> AV-block II°	<input type="radio"/> asystole
<input type="radio"/> AV-block III°	<input type="radio"/> pacemaker rhythm
<input type="radio"/> _____	<input type="radio"/> none

extrasystole SVES VES monomorph polymorph

respiration:

<input type="radio"/> normal	<input type="radio"/> moist rales	<input type="radio"/> apnoea
<input type="radio"/> dyspnoea	<input type="radio"/> stridor	<input type="radio"/> gasping
<input type="radio"/> cyanosis	<input type="radio"/> sibilant rhonchi	<input type="radio"/> ventilation/tube

score

Lab at time

T₁₄

Hb	<input type="text"/>	g/l	CK	<input type="text"/>	u/l	GOT	<input type="text"/>	u/l
Hct	<input type="text"/>	1/1	CK-MB	<input type="text"/>	u/l	GPT	<input type="text"/>	u/l
WCC	<input type="text"/>	1/nl	LDH	<input type="text"/>	u/l	GGT	<input type="text"/>	u/l
thrombo	<input type="text"/>	1/nl	Crea	<input type="text"/>	mmol/l	lipase	<input type="text"/>	u/l
PT	<input type="text"/>	%	Na	<input type="text"/>	mmol/l	amylase	<input type="text"/>	u/l
PTT	<input type="text"/>	s	K	<input type="text"/>	mmol/l	myo-globin	<input type="text"/>	mmol/l
TT	<input type="text"/>	s	Ca	<input type="text"/>	mmol/l	lactate	<input type="text"/>	mmol/l
fibrinog.	<input type="text"/>	g/l	albumin	<input type="text"/>	g/l	plasma-viscosity	<input type="text"/>	Pa*s
AT III	<input type="text"/>	%	CHE	<input type="text"/>	kJ/l	osmo-lality	<input type="text"/>	mos mol/l
glucose	<input type="text"/>	mg/dl	bilirubin	<input type="text"/>	µmol/l	CRP	<input type="text"/>	mg/l
pHa	<input type="text"/>		pO _{2a}	<input type="text"/>	mmHg	SO _{2a}	<input type="text"/>	%
pCO _{2a}	<input type="text"/>	mmHg	BE	<input type="text"/>				

Blood Gases

(electrodes at 37°C):

Ventilation:

oxygen	<input type="text"/>	1/1	PEEP	<input type="text"/>	mbar	VT	<input type="text"/>	ml
MV	<input type="text"/>	l/min	RR	<input type="text"/>	1/min			

Central Venous Pressure

CVP mmHg

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STATUS TIME

T₁₇ (36, ___ °C)

T₁₇

eyes open				
spontaneous	4			
to speech	3			
to pain	2			
absent	1			
verbal:				
converses				
orientated	5			
disorientated	4			
inappropriate	3			
incomprehensive	2			
absent	1			
motor:				
follows command	6			
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decorticate (flexion) rigidity	3			
decerebrate (extension) rigidity	2			
absent	1			

score

narcotised/sedated	<input type="radio"/>
orientated	<input type="radio"/>
dizzy	<input type="radio"/>
conscious	<input type="radio"/>

pupils:	re	li
constricted/middle	<input type="radio"/>	<input type="radio"/>
dilated	<input type="radio"/>	<input type="radio"/>
derounded	<input type="radio"/>	<input type="radio"/>
no light reflex	<input type="radio"/>	<input type="radio"/>

RR / HR regular yes
 carotid pulse yes no respiratory rate no

ECG-monitor

<input type="radio"/> Sinus rhythm	<input type="radio"/> ventricular flutter/fibrillation
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<input type="radio"/> _____	<input type="radio"/> none

extrasystole SVES monomorph polymorph
 VES

respiration:

<input type="radio"/> normal	<input type="radio"/> moist rales	<input type="radio"/> apnoea
<input type="radio"/> dyspnoea	<input type="radio"/> stridor	<input type="radio"/> gasping
<input type="radio"/> cyanosis	<input type="radio"/> sibilant rhonchi	<input type="radio"/> ventilation/tube

Lab at time

T₁₇

Hb	<input style="width: 30px;" type="text"/>	g/l	CK	<input style="width: 60px;" type="text"/>	u/l	GOT	<input style="width: 60px;" type="text"/>	u/l
Hct	<input style="width: 30px;" type="text"/> 0,	1/1	CK-MB	<input style="width: 60px;" type="text"/>	u/l	GPT	<input style="width: 60px;" type="text"/>	u/l
WCC	<input style="width: 30px;" type="text"/>	1/nl	LDH	<input style="width: 60px;" type="text"/>	u/l	GGT	<input style="width: 60px;" type="text"/>	u/l
thrombo	<input style="width: 30px;" type="text"/>	1/nl	Crea	<input style="width: 60px;" type="text"/>	mmol/l	lipase	<input style="width: 60px;" type="text"/>	u/l
PT	<input style="width: 30px;" type="text"/>	%	Na	<input style="width: 60px;" type="text"/>	mmol/l	amylase	<input style="width: 60px;" type="text"/>	u/l
PTT	<input style="width: 30px;" type="text"/>	s	K	<input style="width: 60px;" type="text"/>	mmol/l	myo-globin	<input style="width: 60px;" type="text"/>	mmol/l
TT	<input style="width: 30px;" type="text"/>	s	Ca	<input style="width: 60px;" type="text"/>	mmol/l	lactate	<input style="width: 60px;" type="text"/>	mmol/l
fibrinog.	<input style="width: 30px;" type="text"/>	g/l	albumin	<input style="width: 60px;" type="text"/>	g/l	plasma-viscosity	<input style="width: 60px;" type="text"/>	Pa*s
AT III	<input style="width: 30px;" type="text"/>	%	CHE	<input style="width: 60px;" type="text"/>	kJ/l	osmo-lality	<input style="width: 60px;" type="text"/>	mos mol/l
glucose	<input style="width: 30px;" type="text"/>	mg/dl	bilirubin	<input style="width: 60px;" type="text"/>	μmol/l	CRP	<input style="width: 60px;" type="text"/>	mg/l
pHa	<input style="width: 30px;" type="text"/>		pO _{2a}	<input style="width: 60px;" type="text"/>	mmHg	SO _{2a}	<input style="width: 60px;" type="text"/>	%
pCO _{2a}	<input style="width: 30px;" type="text"/>	mmHg	BE	<input style="width: 60px;" type="text"/>				

Blood Gases

(electrodes at 37°C):

Ventilation:

oxygen	<input style="width: 30px;" type="text"/>	1/1	PEEP	<input style="width: 60px;" type="text"/>	mbar	VT	<input style="width: 60px;" type="text"/>	ml
MV	<input style="width: 30px;" type="text"/>	l/min	RR	<input style="width: 60px;" type="text"/>	1/min			

Central Venous Pressure

CVP mmHg