**Fluid challENges in Intensive CarE (FENICE II STUDY)**

**Case Record Form – ICU admission**

**NAME OF THE CENTER:**

|  |  |  |  |
| --- | --- | --- | --- |
| **DATA OF ICU ADMISSION** |  |  | **2025** |

|  |  |  |
| --- | --- | --- |
| **Inclusion Criteria** | Adult (≥18 years old) patient admitted to ICU and expected to stay at least 48h. | **** |
| **Exclusion Criteria** | Planned admission after surgery for overnight ICU stay. | **** |
| Refusal of consent | **** |
| Moribund patients (i.e. expected survival < 24h) | **** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Reason for ICU admission** | | | |
| **Sepsis** | **** | **Hypovolemia** | **** |
| **Septic Shock** | **** | **Intracranial Haemorrhage** | **** |
| **Trauma (with TBI)** | **** | **Renal Failure** | **** |
| **Trauma (no TBI)** | **** | **Haemorrhagic Shock** | **** |
| **Stroke** | **** | **Postoperative (unplanned)** | **** |
| **ARF (no ARDS)** | **** | **Obstructive Shock** | **** |
| **ARF (ARDS)** | **** | **Cardiogenic Shock** | **** |

|  |  |  |
| --- | --- | --- |
| **Age (year)** | |  |
| **Gender** | | **M ** |
|  | | **F ** |
| **Height (cm)** | |  |
| **Weight (Kg)** | |  |
| **FRAILTY SCALE (1-9)** | |  |
| **SOFA at ICU admission** | |  |
| **Admission** | **OR ** | |
| **WARD ** | |
| **ED ** | |
| **Other ** | |
| **Fluid Balance at ICU admission (ml)** | |  |
| **GCS at ICU admission** | |  |
| **RASS at ICU admisison** | |  |

|  |  |
| --- | --- |
| **Comorbities at ICU admission** | |
| **None** | **** |
| **CHF** | **** |
| **CRF** | **** |
| **COPD** | **** |
| **Diabetes** | **** |
| **Hypertension**  **(home therapy)** | **** |
| **Stroke** | **** |
| **Peripheral vascular disease** | **** |
| **Malignancy (solid)\*** | **** |
| **Haematological**  **Malignancy\*** | **** |
| **\* = active treatment** | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ICU values admission** | | | | |
| WBC (10^9/L) |  | Albumin (g/L) |  | **Ph** |
| Neu\_Percent (%) |  | Cre (mg/dL) |  | **PaO2**(mmHg) |
| PLT (10^9/L) |  | Urea (mg/dL) |  | **FiO2**(%) |
| Hb (g/dL) |  | AST (UI/L) |  | **PCO2**(mmHg) |
| HCT (%) |  | ALT (UI/L) |  | **Na**(mmol/L) |
|  |  | BIT (mg/dL) |  | **K**(mmol/L) |
|  |  | CRP (mg/dL) |  | **Cl**(mmol/L) |
|  |  | Procalcitonin (ng/ml) |  | **Lactate**(mmol/L) |

**DAY 1-5 Mandatory Fields (fluids)**

|  |
| --- |
| INPUT VOLUME IV FLUID INFUSIONS (ML) |
| INPUT VOLUME IV FC (ML) |
| INPUT VOLUME OTHER IV INFUSIONS (ML) |
| INPUT VOLUME TOT (ML) |
| INPUT ENTERAL FEEDING |
| INPUT BLOOD PRODUCTS (ML) |
| TOTAL INPUT DAY 1 |
|  |
| OUTPUT URINE |
| OUTPUT NGT |
| OUTPUT DREINAGES |
| OUTPUT OTHER |
| TOTAL OUTPUT DAY 1 |
|  |
| DAYLY FLUID BALANCE DAY 1 |

**DAY 1-5 Mandatory Fields (lab data)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ICU values Day 1-5** | | | | |
| WBC (10^9/L) |  | Albumin (g/L) |  | **Ph** |
| Neu\_Percent (%) |  | Cre (mg/dL) |  | **PaO2**(mmHg) |
| PLT (10^9/L) |  | Urea (mg/dL) |  | **FiO2**(%) |
| Hb (g/dL) |  | AST (UI/L) |  | **PCO2**(mmHg) |
| HCT (%) |  | ALT (UI/L) |  | **Na**(mmol/L) |
|  |  | BIT (mg/dL) |  | **K**(mmol/L) |
|  |  | CRP (mg/dL) |  | **Cl**(mmol/L) |
|  |  | Procalcitonin (ng/ml) |  | **Lactate**(mmol/L) |

***FLUID CHALLENGE FORM***

***What was the main indication for fluid administration?***

⬜ Hypotension ⬜ Weaning vasopressor ⬜ Cardiac output ⬜ Oliguria ⬜ Skin mottling

⬜ Hyperlactatemia ⬜ ScvO2 ⬜ SVV/PPV ⬜ CVP/PAOP

⬜ Other; please specify:

***Hemodynamic variable considered to predict a positive response to a fluid challenge:***

Indicate the one used clinically in this fluid challenge

⬜ No variable used ⬜ PAOP *mmHg* ⬜ CVP *mmHg*

⬜ SVV *%* ⬜ PPV *%* ⬜ GEDVI *ml/m2*

⬜ Passive leg raising (PLR): ⬜ Arterial pressure increase during PLR *%*

⬜ CO / SV increase during PLR *%*

⬜ Other test; please specify:

***Type of fluid***

⬜ NaCl 0.9% ⬜ RL Hartmann ⬜ Plasmalyte ⬜ Starch ⬜ Albumin 4-5% ⬜ Gelatine ⬜ Dextrane

⬜ Other; please specify:

***Amount fluids given as fluid challenge:*** *ml*

***Rate of fluid administration:*** ⬜ ml */min or* ⬜ *ml/h*

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***Specific comments of the investigators:***

Arterial pressure diastolic *mmHg*

Arterial pressure mean *mmHg*

PAP systolic *mmHg*

PAP diastolic *mmHg*

PAP mean *mmHg*

PAOP *mmHg*

CVP *mmHg*

CO *L/min* **.**

**.**

**.**

SV *ml*

SVV *%*

PPV *%*

GEDVI *ml/m2*

**.**

EVLWI *ml/kg*

**.**

Urine output *ml/h*

***Response to fluids:***

⬜ No response ⬜ Positive response ⬜ Do not know / uncertain

***Positive response to fluids based on:***

⬜ Change in arterial pressure ⬜ Change in cardiac output ⬜ Change in stroke volume

⬜ Change in heart rate ⬜ Change in urine output ⬜ Change in lactate level

⬜ Change in skin perfusion ⬜ Change mental state ⬜ Change in ScvO2

⬜ Change in CVP/PAOP ⬜ Change in SVV/PPV

⬜ Other; please specify:

***Did you consider further fluids?***

⬜ No ⬜ Yes

***Was a variable used as safety limit?***

⬜ No variable used ⬜ PAOP *mmHg*  ⬜ CVP *mmHg*

⬜ SVV ⬜ PPV *%* ⬜ GEDVI ml/m2

⬜ EVLW *ml/kg* CO *L/min* ⬜ SpO2/SaO2  *%*

⬜ Other; please specify:

***Was the fluid challenge stopped for safety reasons?***

⬜ No ⬜ Yes: Stopped due to: ⬜ Low arterial pressure ⬜ High arterial pressure ⬜ Low CO ⬜ High CO

⬜ Pulmonary edema ⬜ High CVP/PAOP ⬜ Futility

***If you have not used one of the following variables, please specify reasons***

**CVP** ⬜ Not available ⬜ Not applicable ⬜ Other variable more relevant ⬜ No trust in this variable

**PAOP** ⬜ Not available ⬜ Not applicable ⬜ Other variable more relevant ⬜ No trust in this variable

**GEDVI** ⬜ Not available ⬜ Not applicable ⬜ Other variable more relevant ⬜ No trust in this variable

**SVV** ⬜ Not available ⬜ Not applicable ⬜ Other variable more relevant ⬜ No trust in this variable

**PPV** ⬜ Not available ⬜ Not applicable ⬜ Other variable more relevant ⬜ No trust in this variable

**PLR** ⬜ Not available ⬜ Not applicable ⬜ Other variable more relevant ⬜ No trust in this test

**PLR = Passive leg raising**

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