Adult Emergency Nurse Protocol

Health
South Eastern Sydney
Local Health District

FEVER

SESLHDPR/387

Aim:

- Early identification and treatment of life threatening causes of febrile illness i.e. meningococcal meningitis.
- Early initiation of treatment / clinical care and symptom management as per the sepsis pathway.
- Consistent use of Clinical Excellence Commission Adult Emergency Sepsis resources when indicated

Assessment Criteria: On assessment the patient should have one or more of the following signs / symptoms:

- Fever >37.5°C/Fever at home
- Signs of infection
- Rigors / Chills
- Headache
- Malaise
- Delirium/altered GCS

Escalation Criteria: Immediate life-threatening presentations that require escalation and referral to a Senior Medical Officer (SMO):

- **Risk factors of Sepsis** (CEC Sepsis Pathway)
- Pregnancy
- Fever in ED/at home with Haematology / Oncology Diagnosis (Ref to local febrile Neutropenia policy)
- Acute confusion / agitation
- Tachypnoea
- Hypotension and tachycardia
- Immunosuppressed / steroids (consider febrile Neutopenia)

Primary Survey:

- Airway: patency
- Circulation: perfusion, BP, heart rate, temperature
- Breathing: resp rate, accessory muscle use, air entry, SpO_2.
- Disability: GCS, pupils, limb strength

Notify CNUM and SMO if any of the following red flags are identified from the Primary Survey and Between the Flags criteria.[1]

- Airway – at risk
  - *Partial / full obstruction*
- Disability – decreased conscious level
  - *GCS ≤ 14 or any fall in GCS by 2 points*
- Fluids
  - Hydration status- In/Out
  - Urinary symptoms
- Breathing – respiratory distress
  - *RR < 5 or >30 /min*
  - *SpO_2 < 90%*
- Exposure
  - *Temperature < 35.5°C or > 38.5°C*
- *Glucose*
  - *BGL < 4mmol/L or > 20mmol/L*
- Circulation – shock / altered perfusion
  - *HR < 40bpm or > 140bpm*
  - *BP < 90mmHg or > 200 mmHg*
  - *Postural drop >20mmHg*
  - *Capillary return > 2 sec*

History:

- Presenting complaint
- **A**llergies
- **M**edications: Anticoagulant Therapy, Anti-hypertensives, Diabetic meds, Analgesics, Inhalers, Chemotherapy, Non-prescription meds, any recent change to meds
- **P**ast medical past surgical history: immunosuppression including HIV, cancer; splenectomy,
- **L**ast ate and Last Menstrual period
- **E**vents and mechanism leading to presentation such as surgery, animal/human bite?
- Does patient have signs or symptoms of infection, such as: fevers/rigors, dysuria/frequency, headache, neck stiffness, peritonism, cough, SOB or cellulitis?
- Immunisation history/ travel within last 6-months

Notify CNUM and SMO if any of following red flags is identified from History or Systems Assessment.

- Elderly > 65 years
- Temperature <35.5 or >38.5°C
- History of IV Drug Use or surgical procedure
- Immunosuppressed / steroids
- Severe abdominal or back pain
- Decreased urine output
- Reduced/inadequate fluid intake
- Acute confusion / agitation
- Valvular heart disease
- Non-blanching rash
- Recent Surgery or Travel
- Neutropenia

Investigations / Diagnostics:

Bedside investigations

- BGL: If < 3mmol/L or > 20mmol/L notify SMO
- ECG: [as indicated] look for Arrhythmia , AMI
- Urinalysis / MSU (If UA positive)
- Urine βHCG if suspected pregnancy
- Head to toe assessment
- Culture swab: (wounds, skin, throat, devices)

Laboratory / Radiology:

- **Pathology**: Refer to local nurse initiated **STOP**
  FBC, UEC, LFTS, Coags, Glucose, Venous Lactate
  Blood Cultures x 2 (if Temp ≤35°C or ≥38.5)
- **Radiology:** Consider CXR for patient with Respiratory symptoms - refer to SMO

Resuscitation / Stabilisation:

- Oxygen therapy and cardiac monitor [as indicated]
- IV Cannulation (16-18gauge if unstable)

Symptomatic Treatment:

- **Analgesia:** as per district standing order
- **Antipyretic:** as per nurse initiated medications

• IV Fluids: Sodium Chloride 0.9% I L IV stat versus over 8 hours *(discuss with SMO)*	• **IV Fluids:** as per district standing order • **IV Antibiotics: within 60minutes if suspected sepsis**
Supportive Treatment: • Nil By Mouth (NBM) if required • Monitor vital signs as clinically indicated (BP, HR, T, RR, SpO_2) • Monitor pain assessment / score	• Monitor neurological status GCS [as clinically indicated] • Fluid Balance Chart (FBC) • Cooling [as required]

Practice Tips / Hints:

- Elevated body temperature can be physiological, or caused by pathological processes such as infection, inflammatory processes, or malignancy.
- Fever is the body's natural response to infection. Raising the body temperature helps the body to fight off the infection, so it is not always necessary to treat the fever.
- Before an extensive work-up, the presence of fever should be confirmed and fever pattern documented.
- Typical signs and symptoms of infection are frequently absent in elderly patients, and as they age and becomes more frail, basal body temperature decreases, making it less likely that patients will achieve classic definitions of fever.
- Infection should be suspected in elderly patients with any of the following characteristics: decline in functional status, defined as new or increasing confusion, incontinence, falling, deteriorating mobility, reduced food intake, or failure to cooperate with staff.
- A lactate greater than 2mmol/L in the setting of potential sepsis (Yellow Zone of CEC Adult Sepsis Pathway) is **significant**

Further Reading / References:

1. Deteriorating Patient - CERS for the Managementof Adult and Maternity Patients

2. Best Practice BMJ. Assessment of Fever of Unknow Origin in Adults. http://bestpractice.bmj.com/topics/en-gb/375

3. Clinical Excellence Commission Sepsis Kills Program. Adult Sepsis Pathway v2. http://www.cec.health.nsw.gov.au/patient-safety-programs/adult-patient-safety/sepsis-kills/sepsis-tools

Acknowledgements: *SESLHD Adult Emergency Nurse Protocols were developed and adapted with permission from:*

- Murphy, M (2007) Emergency Department Toolkits. Westmead Hospital SWAHS
- Hodge, A (2011) Emergency Department Clinical Pathways. Prince of Wales Hospital SESLHD.

Revision and Approval History:

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May 2021	6	Approved by Executive Sponsor.
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