# Signs and symptoms of Neutropenic Sepsis

Chemotherapy can result in a life threatening side effect of Neutropenic Sepsis.

**Early diagnosis will prevent death.**

## Early signs

- Feeling generally unwell
- T 38°C at any time or 37.4 on two separate readings an hour apart

**Symptoms of infection**

- Shivering, hot and cold, spontaneous rigor
- Diarrhoea
- At the early stage the patient will be warm and alert and not look unwell. However, they can deteriorate rapidly and death can follow

## Late signs:

- Cold and clammy
- Restless, anxious or confused
- Hyperthermic
- Hypotensive, tachycardic

## Patients at Risk

- Post chemotherapy. 7-10 days is a classic time for neutropenia following chemotherapy, however, delayed neutropenia (up to 28 days) can occur with some regimes.
- Haematology patients
- Elderly
- Any indwelling central catheter
- Co-morbid conditions e.g. IHD/COPD
- General poor health

## What to do

- **HISTORY** - Is the patient on chemotherapy? When did they last have treatment? How have they been feeling? Are there any specific symptoms of infections?
- **EXAMINE** - Temperature, pulse, blood pressure and respiration.
- **ACTION** - Urgent full blood count is required, therefore refer urgently to local acute provider.
- **TREATMENT** - On diagnosis of Neutropenic Sepsis, urgent intravenous antibiotics must be administered within one hour or admission time
Management of Neutropenic Sepsis*

Remember, Neutropenic Sepsis can be **FATAL**. Symptoms may be vague and often there is no obvious focus of infection.

**HISTORY**

Is the patient on chemotherapy?

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**YES**

When did the patient last receive chemotherapy?

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28+ days

- Treat symptoms
- Inform local chemotherapy unit

0-28 days

**EXAMINE**

- How are they feeling?
- TPR and BR
- Presence of 1-3 symptoms of *SIRS*

**ACTION**

**IN THE COMMUNITY:**

- Urgently refer to acute trust
- 999 ambulance may be required

**AT THE ACUTE TRUST:**

- Urgent full blood count, blood cultures and white differential
- Start antibiotics

**TREAT**

**IF NEUTROPENIC SEPSIS IS DIAGNOSED:**

- **URGENT IV ANTIBIOTICS WITHIN 1 HOUR ADMISSION**
- **FOLLOW NEUTROPENIC SEPSIS POLICY**

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*SIRS = Systemic Inflammatory Response Syndrome.*

**Symptoms:** • Fever or hypothermia • Shaking/chills • Tachycardia • Tachypnoea • Hypotension

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*This information is based on the Sussex Cancer Network's Heat assessment tool.*