# Fever Management in Adult – Medication Vs Comfort Measures





Rashid, R., Sandra Paul, C., Siew Jong, H., Yuting, Z.,

Santhiananthan V., Presentacion, P., YanFang, D.



#### **BACKGROUND**

KK Women's and Children's Hospital is committed to lead in excellent, holistic and compassionate care for Women and Children. Comprehensive and systematic assessment including history taking, vital signs monitoring (blood pressure, respiration rate, pulse rate, body temperature and pain) is essential to make accurate diagnosis and determine the most efficacious treatment plan. Body temperature is one of the vital signs that must be monitored to ensure safe and effective care.

Body temperature measurement is recommended by the National Institute of Clinical Excellence (NICE) as part of assessment in acute illness in adult (NICE, 2007). Wide variations exist on the methods and techniques used to measure body temperature. In KKH, the most common way used is a tympanic scanner (Thermoscan Device) or a standard digital thermometer taking axillary temperature.

In Obstetrics and Gynecology setting, elevated body temperature or fever is one of the most common presenting symptoms among patients as a result of infection, postoperative inflammation changes etc. During fever, the "set-point" in hypothalamus shift upwards to febrile level. The objectives in treating fever are to first reduce the elevated set-point of the hypothalamus hence reduce core temperature. Anti-pyretic is found to be effective in fever treatment by working on hypothalamus set-point. Besides that, cold compress is traditionally used as non-pharmacological measure to reduce body temperature.

We took the opportunity to look into the current nursing practice of using cold compress as its effectiveness to reduce core temperature.

#### **CURRENT PRACTICE**

## **TEMPERATURE**Reads above 37.5°C

#### **MEDICATION**

Nurses administered Anti-Pyretics as ordered by doctor



Cold Compress prepared by nurses

#### **Recheck Temperature**

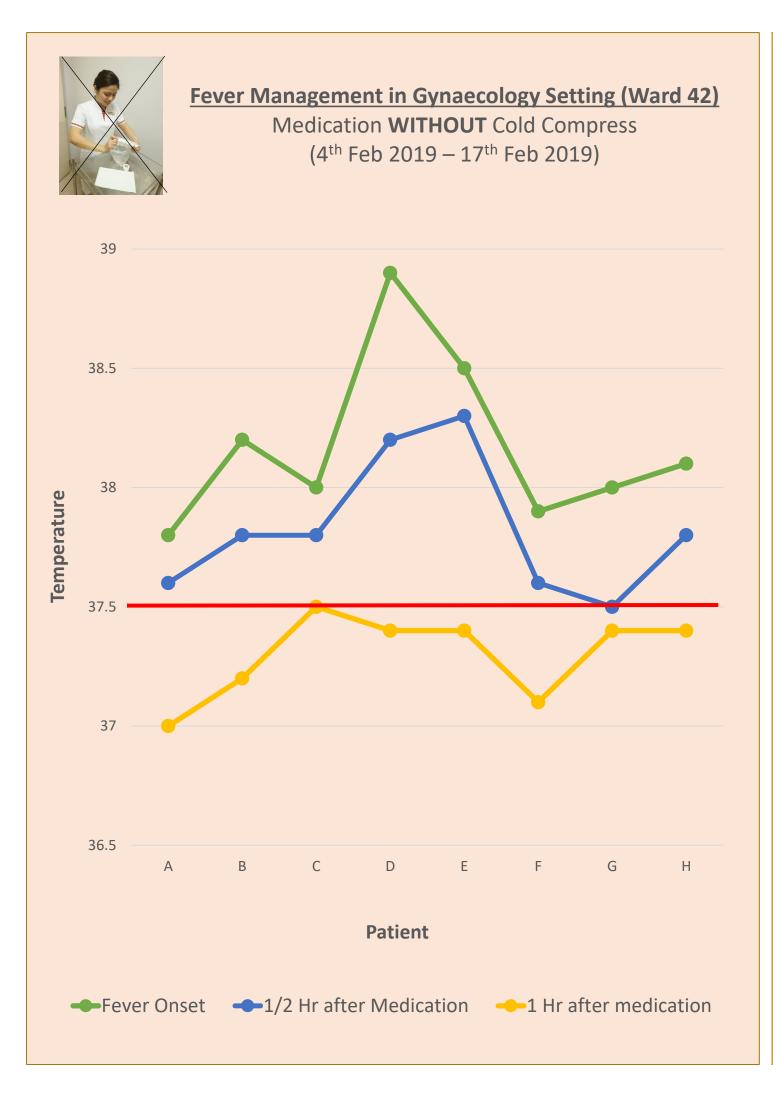
½hour and 1hour later to ensure patient temperature is within normal range

#### **AIM**

- 1. To align nursing practice for fever management in KKH for adults
- 2. To enhance patient's safety and provide quality care through evidence based practices
- 3. To reduce the nursing manpower utilization for the time taken to prepare a cold compress

### **METHODOLOGY**

Comparative data of sixteen Gynecology patients with fever of 38°C and above on oral anti-pyretic with or without the use of 'cold compress' was collected for one month (February 2019) in Ward 42. First two week of February, patients who has fever were only given anti-pyretic (Paracetamol / Ibuprofen) as part of the treatment intervention. Subsequent two-week, patients were given both anti-pyretic and comfort measure such as cold compress to manage their fever.





#### RESULT

There is no significant difference in the 2 groups. Patients who are administered anti-pyretics during onset of fever requires an hour for the temperature to be back near normal range. Whilst, comparison group takes the same hour for the temperature to be back to normal range with administration of both comfort measure.

#### **IMPLEMENTATION**

We recommended the new nursing practice for fever management to all wards in KKH. We reviewed and amended the Protocol and Practice (PnP) for Fever Management guidelines to align the nursing practice across adults wards in KKH (Tables as shown below).

O & G Ward Nurses	<ul> <li>Ensure all febrile patients are given anti-pyretic regularly</li> <li>Monitor fever regularly to ensure patient remain afebrile for 24hours since the last spike</li> <li>Only administer comfort measure upon request</li> </ul>
Doctor	- Introduce new nursing practice guideline during orientation
Fever Management P&P	- To liaise with the Professional Practice Council to review on the guideline

#### **CONCLUSION**

The new process of standardizing managing of fever with only anti-pyretic effectively reduce core temperature, and also help nurses to priorities their tasks for nursing care rather than taking the time to prepare cold compress.

Cold compress is only given to patient upon request to relieve the 'hot' feeling over the temples of the head.

The nursing PnP guidelines for fever management for women will be aligned to Pediatric. Administration of anti-pyretic alone is found to be effective in fever management.

#### FINAL OUTCOME

In KKH, we advocate the use of oral Anti-Pyretics round the clock to treat patients with FEVER. Data confirms, administration of oral anti-pyretic round the clock will return the body temperature to a normal range within an hour with or without use of comfort measure such as cold compress

#### **References**

McCallum L, Higgins D (2012) Measuring body temperature. *Nursing Times* [online]; 108: 45, 20-22. National Institute for Health and Clinical Excellence (2007) *Acutely Ill Patients in Hospital: Recognition of and Response to Acute Illness in Adults in Hospital*. London: NICE.