

# MANAGEMENT OF CATASTROPHIC BLOOD LOSS AT ASHFORD HOSPITAL

CHALLENGES OF SUPPLYING BLOOD FOR A REMOTE SITE

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Transfusion practitioner at ASPH

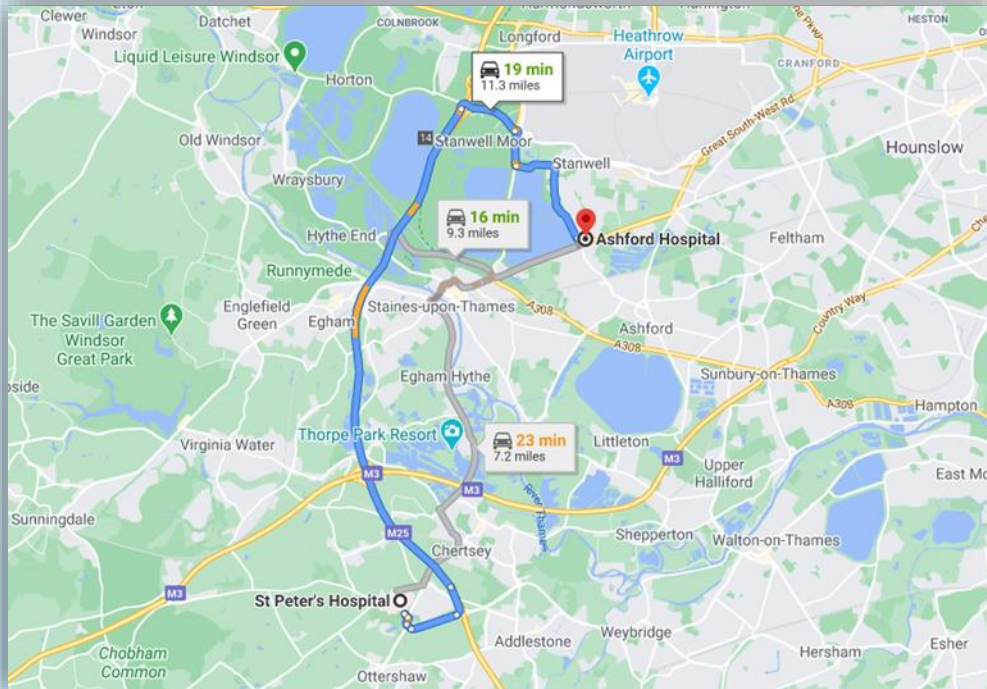
# What exactly happened?

- 22/08/2019: 26years old attended for a scheduled diagnostic laparoscopy under GA to rule out endometriosis
- Surgery planned for Ashford site as a day case
- Procedure resulted with catastrophic massive haemorrhage on introduction of trocar at the START of the procedure. She became peri-arrest before ambulance could take her over to SPH and had an emergency laparotomy on site in attempt of haemorrhagic control.

# Ashford hospital site



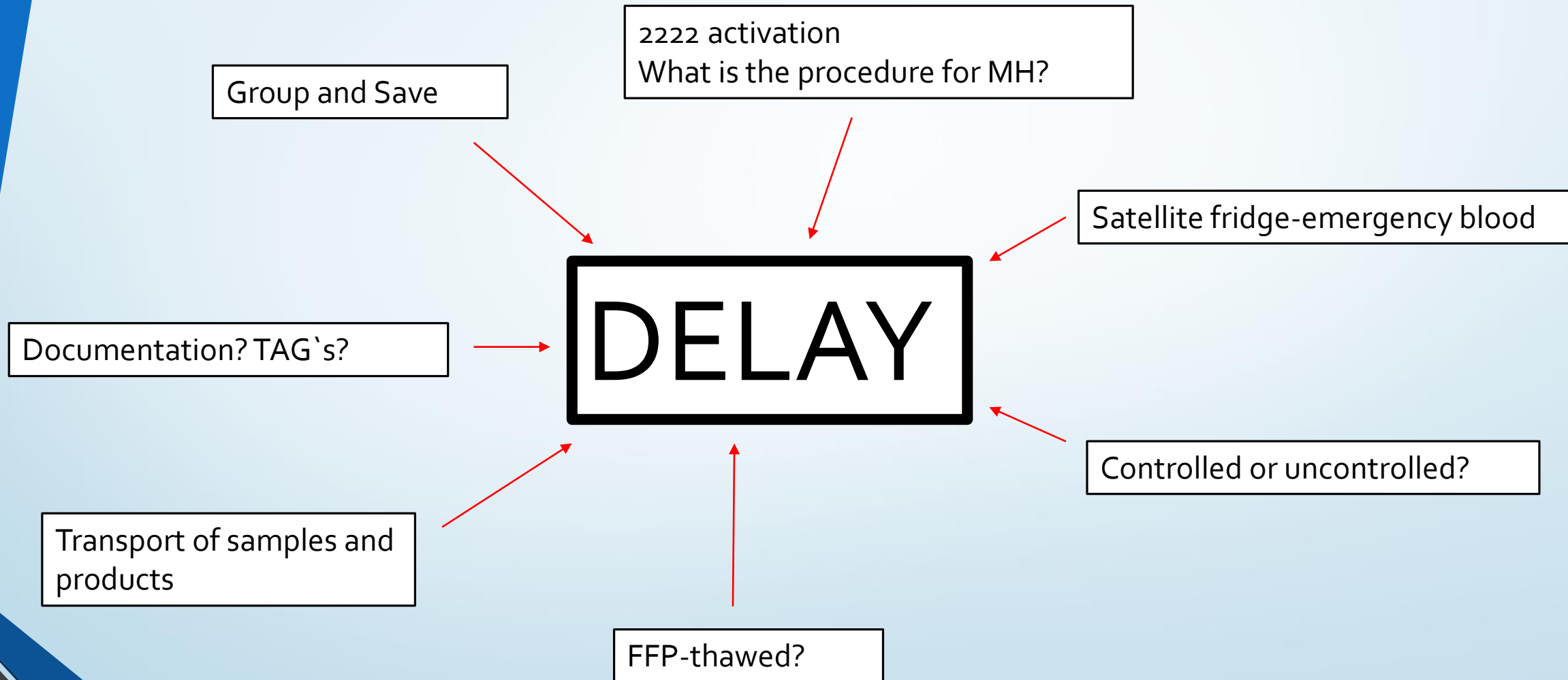
11.3  
miles



- Unpredictable traffic
- Heathrow nearby
- No guaranteed delivery times for blood components



# Chain of events



# Investigation and root cause

Ashford  
theatre  
profile

Group and  
save

Emergency  
blood  
provision

Transport  
issues



Training!

Thawing  
but when?

MH drills

# What has been done since?

- Full Trust investigation
- Policy change
- Training
- Switchboard changes
- MH Laminates (theatre and resus trolleys)
- Query to move the satellite fridge to main theatre-unfortunately no out of hours access
- Transportation





# MH flowchart for Ashford

## Transfusion Management of Massive Haemorrhage in Adults at Ashford Hospital Site

**Blood bank MH number:** 6025

**SPH blood bank:** 3036

**Transfusion practitioner:** 6178,  
bleep 8110

**Helpdesk:** 2882

**Location of emergency**

**blood:** Ashford specimen  
reception room-level 3 at  
phlebotomy department

### Aims for therapy:

Hb 80-100g/L

Platelets  $.75 \times 10^9/L$

PT/APTT ratio  $<1.5g/L$

Fibrinogen  $>1.5g/L$

Calcium  $>2mmol/L$

Temp  $>36C$

PH  $>7.35$  (on ABG)

Monitor for hyperkalaemia!

**Prevent Hypothermia:** Use fluid warmer  
and/or use forced air warming blanket

Consider 10ml Calcium chloride 10% over  
10 minutes

Bleeding/collapse HR $>110$  BP $<90$  ongoing severe bleeding eg: 150ml/min and clinical  
shock

**Activate Massive Haemorrhage Pathway**

**Call 2222**

State "Massive Haemorrhage, Location and Speciality"

**CCL (clinical Communication lead) to call:**

1. Blood bank on ext 6025 to give patient details
2. Helpdesk on ext 2882 to arrange pick up for urgent group  
and save sample if needed

**ALL BLEEDING TO BE TREATED AS UNCONTROLLED**

4 units of RBC, 4 units of FFP, 1 pool of platelet and cryoprecipitate  
as needed sent over to Ashford hospital

**Thawing time:** 20-25 minutes for FFP and Cryo

Platelet might not be available immediately!

### **STOP BLEEDING**

**Administer Tranexamic Acid**

- Especially in trauma
- Ideally within 1 hour

(1gr bolus followed by 1 gr infusion  
over 8 hours)

SPH Blood bank will  
call helpdesk on ext  
2882 to arrange for  
a driver to pick up  
RBC, FFP etc!

**SPH Blood bank to phone  
Ashford hospital when  
products left with the  
driver!**

### **Stand Down**

Return unused components and  
inform blood bank

Thromboprophylaxis should be considered when patient stable!

## Outcome for the patient

Procedure resulted with catastrophic massive haemorrhage on introduction of trocar at the START of the procedure. Patient had an emergency laparotomy on site in attempt of haemorrhagic control. She was then shipped to SPH with packed open abdomen. On the same day patient went back to theatre for repair of iliac artery laceration and repair of L common iliac vein, inferior cava injury where the abdomen was not closed again. After the patient stabilised abdomen was closed on the 25/08/2019. Later on patient was treated for SIRS, sepsis syndrome and started on NOAC. Has been discharged on the 13/09/2019.

Since discharge she has suffered obstructed bowels, alopecia, foot dyesthesia due to arterial insufficiency, PTSD, OCD and increased anxiety, intermittent speech and concentration problems and poor sleep.



Thank you for listening!

