

# Stop the bleeding!

## “Circuit training” to teach haemorrhage control.



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### Introduction

Teaching cohorts of clinical fellows has revealed a competitive streak! We run themed teaching days, including a trauma day. To keep interest, we devised a circuit to demonstrate and practice techniques for haemorrhage control.

*“Love the concept, the time trial element (true to real life) and the practical skills”*



### Methods

The circuit consists of 4 stations:

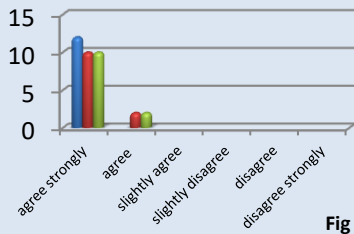
- insertion of vertical mattress sutures in a wound, including use of local anaesthetic
- placing a tourniquet on a model arm before a pressurised bag of simulated blood emptied Fig 1
- correctly placing a pelvic binder
- applying a compressive dressing on a simulated penetrating wound.

Local anaesthetic infiltration was simulated using food colouring injected into a scotch pancake – the colour allows the infiltration to be seen. Fig 2

A giving set was run under the “skin” of a model arm, with a tongue depressor underneath allowing compression with the tourniquet. Food colouring in a bag of fluid provided “blood”. A latex “wound” was created on tubigrip, and placed over a bottle to mimic a limb.

The circuit was demonstrated by faculty, then learners completed it under timed conditions, in pairs. The fastest team were the winners! Afterwards, key learning points were shared.

- ❖ The session was enjoyable
- ❖ I learned something
- ❖ Competition made it more fun



### Discussion

The sessions were enjoyable for faculty and learners and feedback was positive Fig 3. Some skills and equipment demonstrated were new to learners. The circuit offered demonstration and practice in a safe environment. Subsequent practice has shown good skill retention. Adding a competition increased enjoyment and engagement, and the circuit provided variety in teaching styles.

Equipment required was minimal, low cost, and reusable. The circuit method allowed rapid demonstration of a number of techniques in a short time frame. Running the circuit requires a number of faculty, to demonstrate, time, and reset stations.

### Key Learning points?

- “How to put on pelvic binder/ pressure tourniquet promptly”
- “How to mattress suture”

### Conclusion

Competitive circuits provide a novel way of teaching relatively simple skills, and add enjoyment. Subsequent sharing of key points and resources helps embed knowledge and good retention has been demonstrated. This method could be adapted to similar skills.

*“Really enjoyed the hands on aspect of different ways of stopping haemorrhages, competition aspect, the variety of stations”*