

Development and evaluation of a Thirst Bundle for adult critically ill patients in a tertiary UK Critical Care (CC).

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Background

Interventions to counteract thirst are recommended by experts in CC medicine (1). Despite the well documented symptom burden (2), best practice guidelines for thirst treatment are absent in many UK hospitals. This service improvement initiative aimed to agree and pilot the safety, feasibility and efficacy of a topical treatment bundle for thirst with patient and multi-disciplinary (MDT) input.

Methods

Phase 1.

Systematic review following PRISMA guidelines (PROSPERO: CRD42020193074) (3)

Evidence review

Phase 2.

Patient and staff thirst forum
MDT steering group feedback and agreement on intervention
ICU survivor feedback on proposed intervention
Staff survey on current attitudes and practice

Patient and staff feedback

Phase 3.

Local awareness raising
Provision of equipment and thirst bundle procedural leaflets
Piloting of the GSTT Thirst Bundle on 11 bedded high dependency care
Process, outcome and balancing measures were agreed as indicators of safety, feasibility and effectiveness.

Local pilot

Results

The thirst intervention developed included three elements; ice cold swabs, ice cold water sprays and menthol lip balm (4).

ICU survivor feedback indicated the bundle was acceptable.

The steering group agreed a range of measures to assess thirst based on the literature and clinical feasibility, including markers based on clinician judgement and patient-reported scales.

Pilot Results:

- During the pilot, 78 thirst assessments were reported with 20 patients. Median LOS 16 days (range 1-39). 51% identified significant thirst.
- Thirst bundle led to a reduction in thirst symptoms.
- No safety concerns raised.
- Oral hygiene practices were not affected

The Thirst Bundle: based on Puntillo et al 2014

THIRST INTERVENTION PROCEDURE – THIRST ASSESSMENT

Every patient should receive a once daily thirst assessment.
Rating of thirst is completed using none, mild, moderate, severe rating.
If your patient cannot express any symptoms you can use your clinical judgement as to whether thirst is present and if so, how severe it is.

INCLUDE

- ✓ Your patient is reporting moderate or severe thirst.
- ✓ You are concerned your patient is thirsty through non-verbal signs

EXCLUDE

- Your patient has open wounds in or around the mouth or lips e.g. pressure ulceration
- Your patient has undergone surgery to the mouth or neck (e.g. laryngectomy, glossectomy)
- Your patient does not tolerate oral swabbing or teeth brushing
- Your patient is not reporting any or thirst is mild or you have no clinical concerns regarding significant thirst

THIRST INTERVENTION PROCEDURE

You will need:

STEP 1. Assess the patient's thirst
If your patient is appropriate for treatment proceed to step 2.

STEP 2. Submerge swabs in ICE COLD water; remove excess fluid and swab the mouth and prompt your patient to keep their mouth open whilst swabbing; repeat x2-3 times

STEP 3. Spray your patient's mouth up to 5 times with ICE COLD water aiming at the front of the tongue

STEP 4. Apply menthol lip balm to the lips

STEP 5. Reassess your patient's thirst using the same assessment as completed in step 1.

STEP 6. Document your pre/post treatment scores on the thirst tab in ICIP flow sheets

Monitor throughout and stop if you see any adverse response

Conclusion

By combining patient feedback, local MDT knowledge and best available evidence we have agreed a thirst intervention locally for usage across the MDT and completed a pilot phase. Clinical application of the treatment has shown positive trends in reducing the burden of thirst symptoms for critically ill patients and no safety concerns were identified. The pilot demonstrated requirement for further consideration of ease of assessment and scope for further training to embed the GSTT Thirst bundle into routine practice.

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