

ANTISEPTIC MOUTHWASH FOR OROPHARYNGEAL GONORRHOEA TREATMENT (OMEGA2): A RANDOMISED OPEN-LABEL, PARALLEL-GROUP, RANDOMISED CONTROLLED TRIAL

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Background:

New treatments for oropharyngeal gonorrhoea are required to address rising antimicrobial resistance. We aimed to examine the efficacy of a 14-day course of mouthwash twice daily compared to standard-of-care antibiotics for the treatment of oropharyngeal gonorrhoea.

Methods:

The OMEGA2: Mouthwash as a treatment for oropharyngeal gonorrhoea trial was a parallel-group and open-labelled randomised controlled trial among men with untreated oropharyngeal gonorrhoea that was conducted between September 2018 and February 2020 at the Melbourne Sexual Health Centre in Australia. Men were randomised to the intervention (rinsing, gargling and spraying mouthwash twice daily for 14 days) or control (standard-of-care antibiotics) arm via a computer-generated sequence and followed for 28 days. Participants in both arms were advised to abstain from sex or kissing with anyone for 14 days after enrolment. Oropharyngeal swabs were collected at baseline, Day 14 and Day 28 and tested for *Neisseria gonorrhoeae* by nucleic acid amplification test (NAAT) and culture. The primary outcome was detection of oropharyngeal *N. gonorrhoeae* by NAAT at Day 14 after treatment.

Results:

This trial stopped early due to high failure rate in the mouthwash arm and the difficulties in recruitment including high declining rate and the COVID-19 pandemic. Twelve men were randomly assigned to either mouthwash (n=6) or antibiotics (n=6). Of the 11 men who returned at Day 14, the cure rate for oropharyngeal gonorrhoea in the mouthwash arm was 20% (95% CI: 1-72%; 1/5) and in the antibiotic arm was 100% (95% CI: 54-100%; 6/6).

Conclusion:

This is the first trial examining the effectiveness of antiseptic mouthwash for the treatment of oropharyngeal gonorrhoea. We found that a 14-day course of antiseptic

mouthwash twice a day with rinsing, gargling and spraying was not an effective treatment for oropharyngeal gonorrhoea, with 80% of cases failing this treatment.

Disclosure of Interest Statement:

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