

The olive oil trial

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Introduction

Evidence as to the most effective way to manage problematic earwax is lacking. Microsuction, following use of pretreatment softeners such as olive oil, is a method commonly used.

Olive oil is available to purchase as spray or drops. Audiology practitioners in two local services report that patients find the spray easier to use. No previous studies have compared use of olive oil drops and spray.

To address this gap-in-knowledge we compared the clinical effectiveness of pretreatment olive oil spray and drops prior to microsuction in a primary care audiology wax removal service.

Methodology

A pragmatic, cluster randomised control trial design was conducted and analysed using an intention-to-treat approach.

Population: Adult patients (18+) seen for wax removal in 26 GP practices (clusters).

Intervention: Olive oil spray pretreatment; 3 sprays once a day for 7 days.

Comparator: Olive oil drops pretreatment; 3 sprays once a day for 7 days.

Primary Outcome: Success of wax removal at first attempt measured by number of patients discharged after first attempt at wax removal.

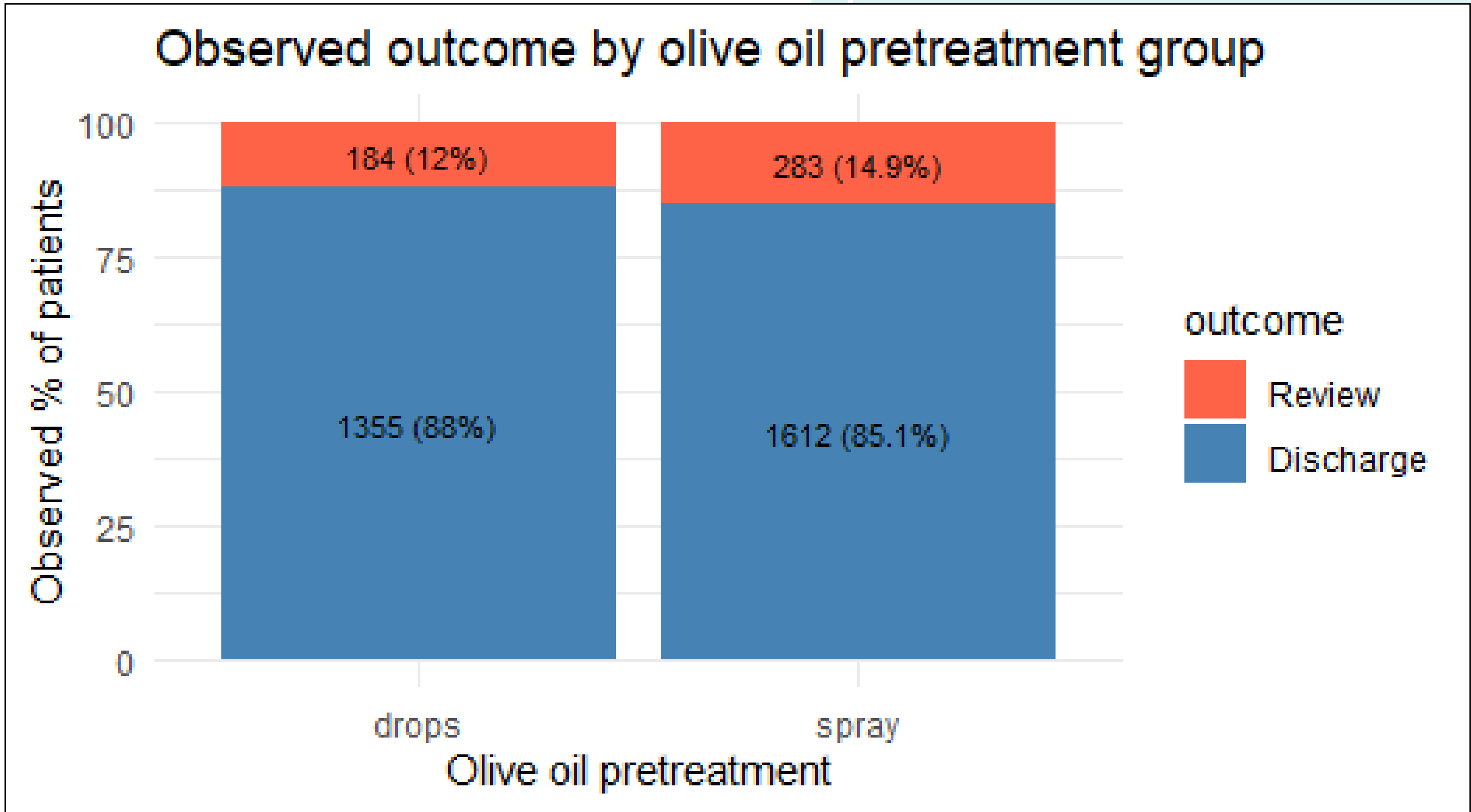
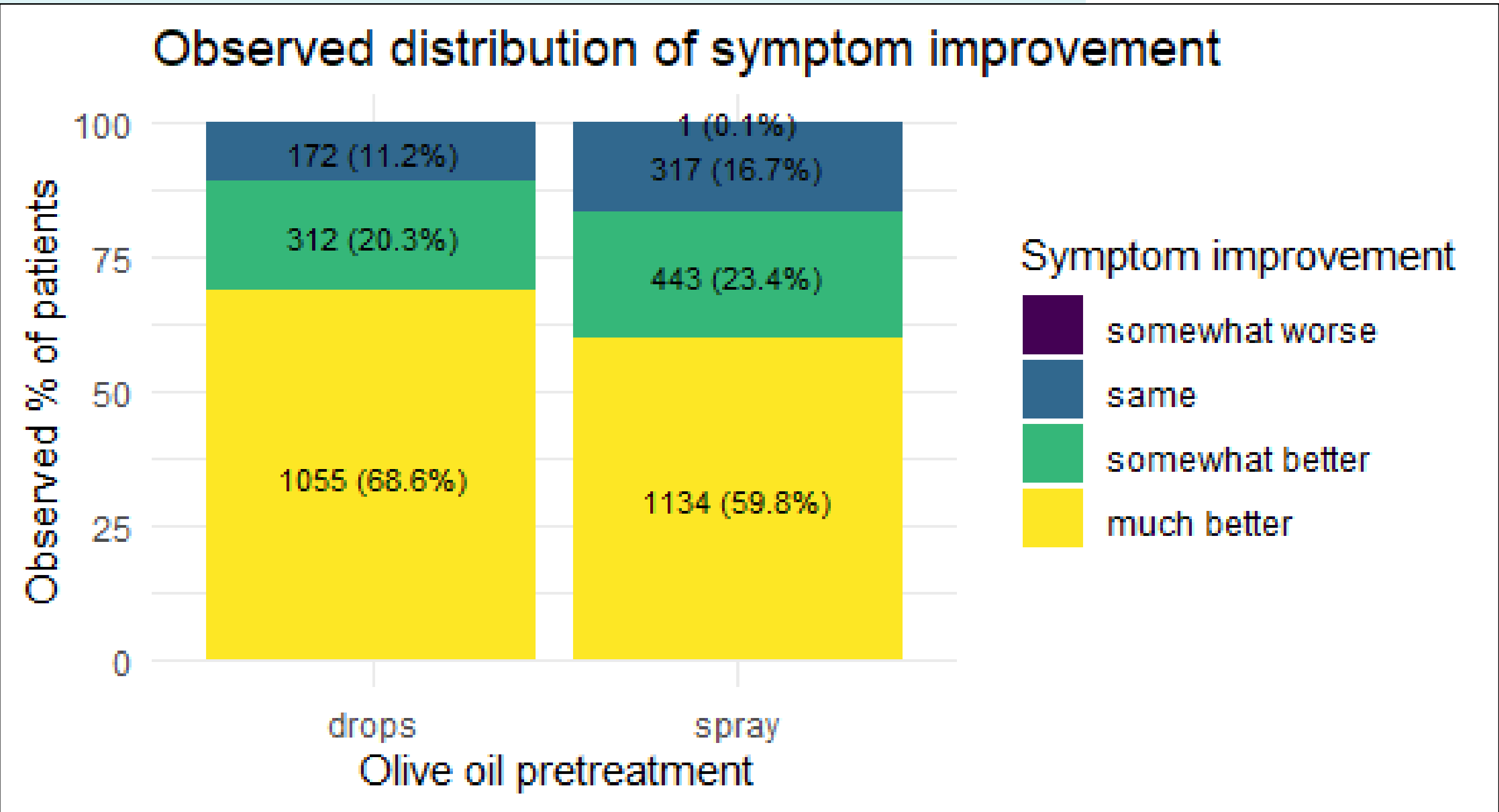
Secondary Outcome: Amount of residual wax; Improvement in self-reported symptoms.

Results

Total of 3434 patients, seen in 26 GP practices included in final analysis.

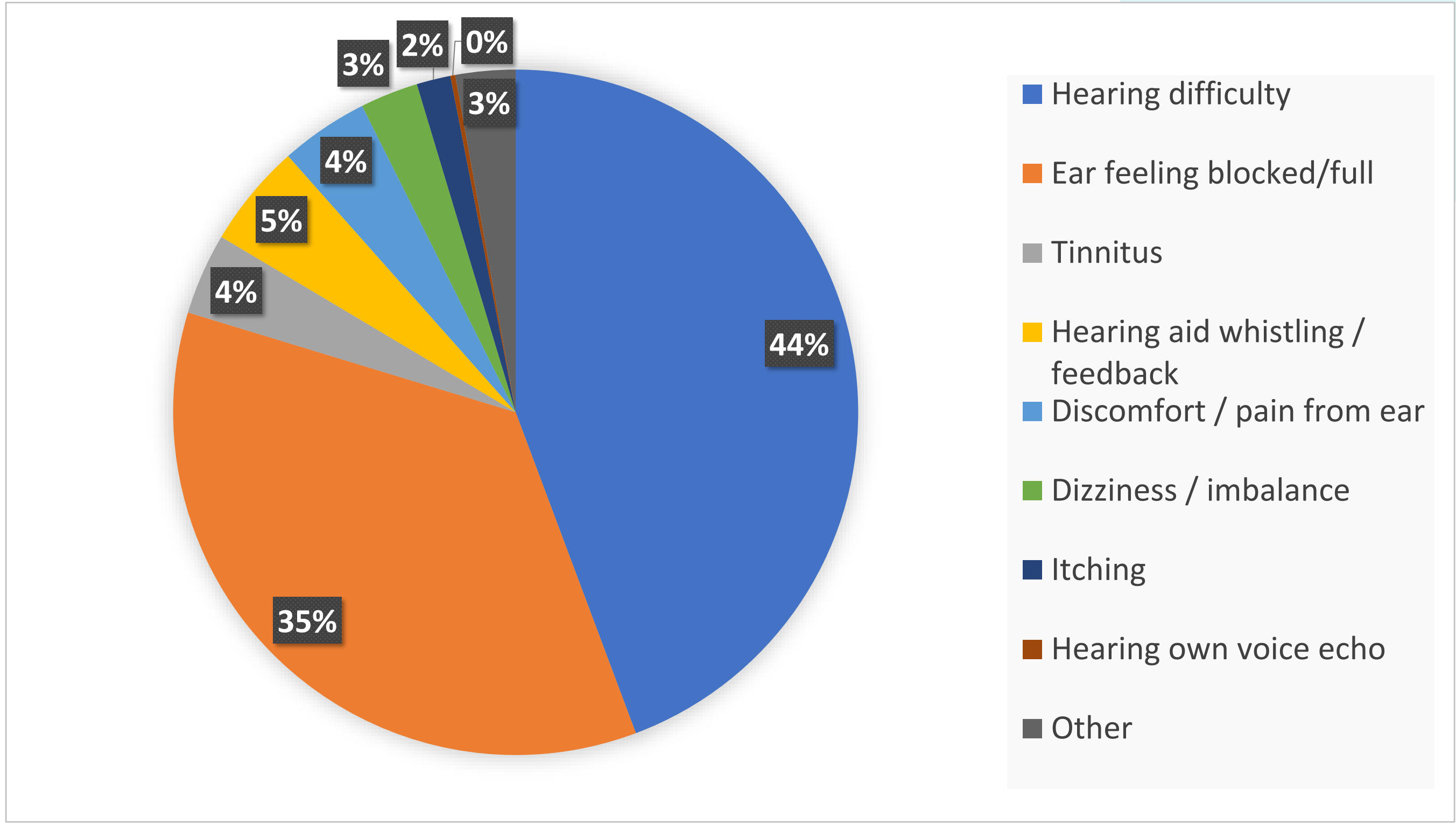
Primary outcome:

No difference in success of wax removal (measured by number of patients discharged after first attempt at wax removal) in the olive oil drops (88%) and spray (85.1%) group.



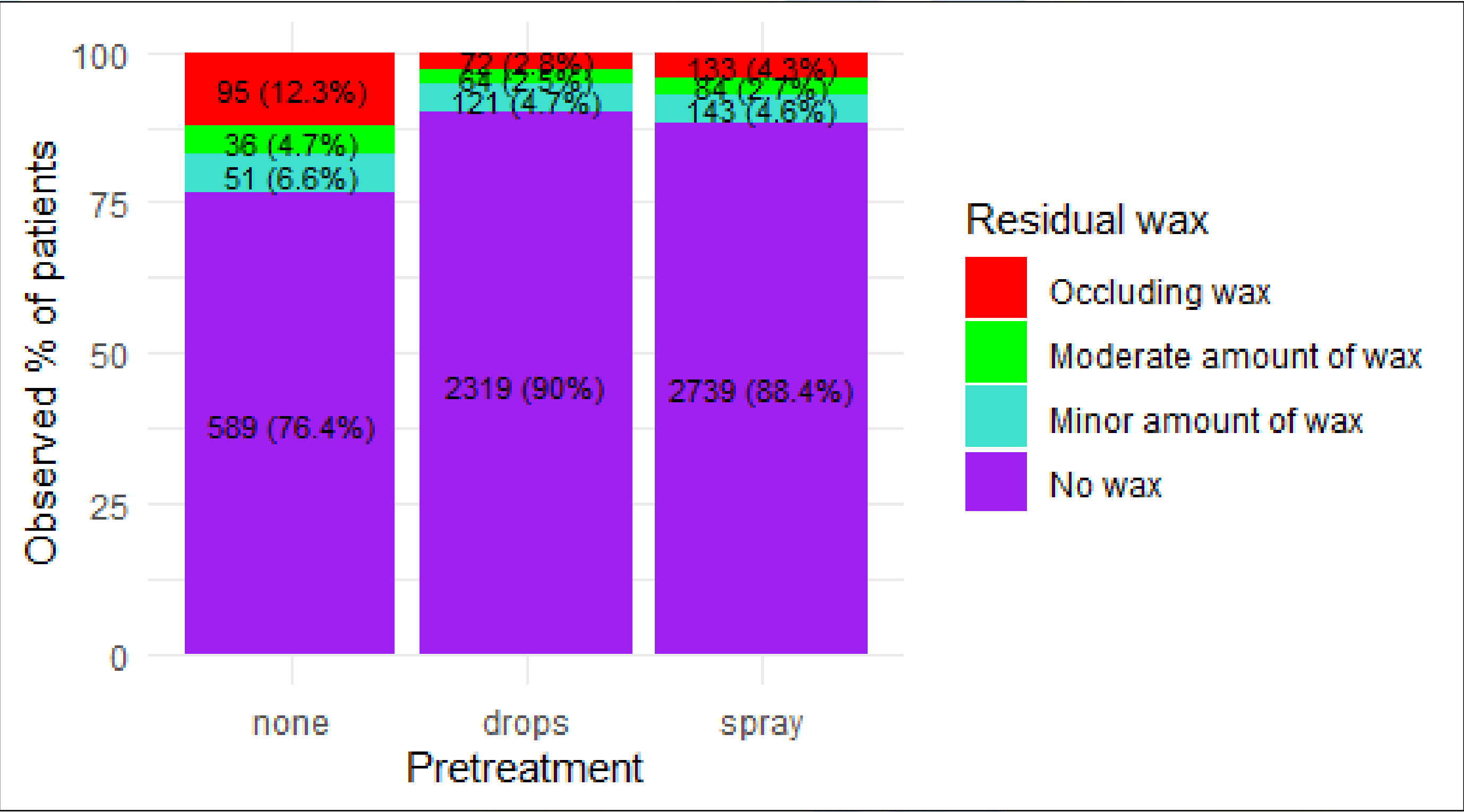
Secondary outcomes:

Hearing difficulty (44%) followed by ear feeling blocked/full (35%) was the most commonly reported symptoms for patients presenting for wax removal.



No significant difference in the amount of residual wax post-microsuction in the olive oil drops and spray group.

Patients who did not use any pretreatment had significantly more residual wax post-microsuction.



Conclusion & Discussion

- No significant difference in outcome of wax removal by microsuction when using pretreatment of olive oil drops or spray.
- Analysis of adherence to protocol revealed around half of patients in each group correctly used the allocated pretreatment.
- This is likely to reflect pragmatic nature of study ('real-life' clinical practice).
- Results may be different in a more controlled trial.
- Use of olive oil drops may be recommended due to cheaper purchase price.
- Overall outcome supports use of pretreatment olive oil prior to microsuction as a safe and effective way of removing problematic earwax.

Adherence to protocol measured by patient feedback slips (return rate 78.9%)

	Drops group	Spray group
Olive oil drops	57.5%	8.4%
Olive oil spray	23.4%	52.3%
Other softener	7.9%	12.2%
Nothing	11%	27.1%

