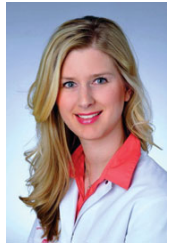


Clinical efficacy of AirFloss Ultra on interdental health and adherence of adults

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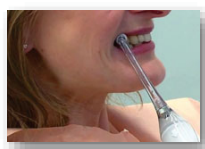
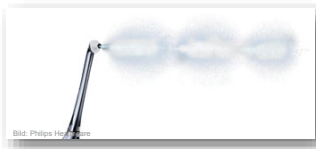
Introduction

- Plaque control with dental floss: interdental space is a problem area¹
- textbooks: recommendation of flossing gold standard
 - domestic use of dental floss: modest reduction of plaque and gingivitis but no documented caries-preventive impact²
 - professional use of dental floss: effective reduction of interdental gingivitis¹
 - clinical success: process quality of flossing
 - patients: complicated use³
 - Microburst-technology (AirFloss) basically effective
 - AirFloss Ultra: limited clinical data



Sonicare AirFloss Ultra

- removal of interdental biofilm
- microdroplet technology
- water-air mixture
- high-velocity with power of 2N
- water reservoir holds 14 ml of liquid
- Automatically triggers 1-3 bursts à 110µl



Objectives

- P** patients with generally good oral hygiene but deficiencies in the interdental region
- I** efficacy of Sonicare AirFloss Ultra on interdental gingivitis (PBI)
- C** gold standard dental floss
- O** gingivitis (PBI) after 4 weeks (primary end point)
plaque reduction (mAPI)

Methods

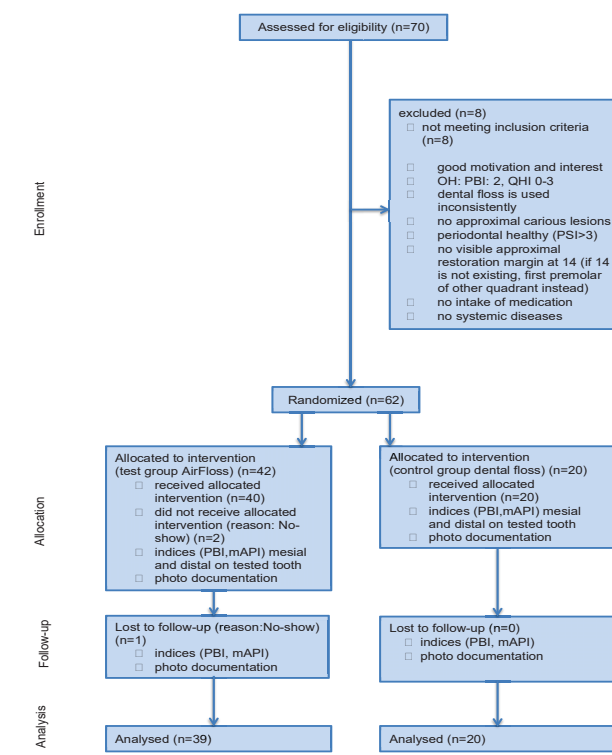


fig. 1: Randomised controlled clinical study (Consort diagram)

Results

follow-up examination: 29/32 patients after 4 weeks

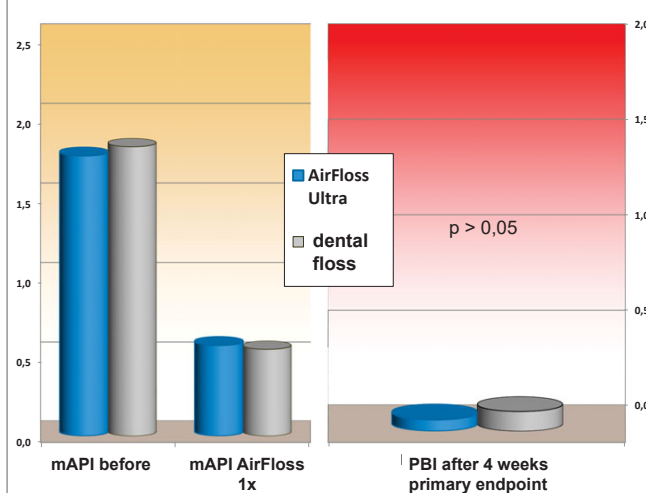


fig. 2: Comparison of dental floss with Sonicare AirFloss Ultra: mAPI directly after use and PBI after 4 weeks

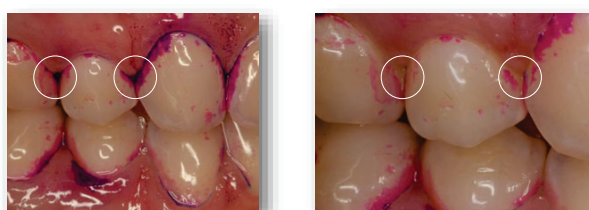


fig. 3: Interdental spaces stained with a plaque revealer and after use of AirFloss

adherence

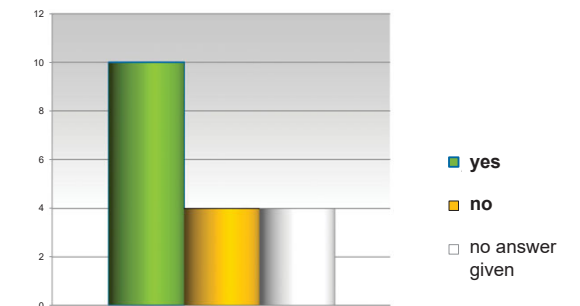


fig. 4: Answers to question: Would you continue using AirFloss Ultra even after end of study?

adherence

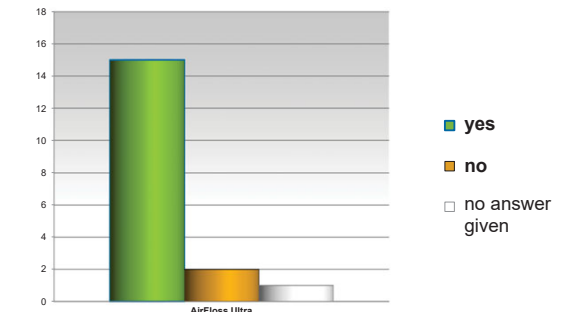
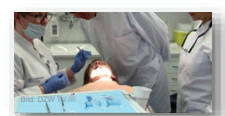


fig. 5: Answers to question: Do you perceive the use of AirFloss Ultra as effective?

Discussion

- external quality: patients with size of interdental space: maximum green
- dental floss: poor acceptance, complicated handling
- AirFloss Ultra: easy to handle
- dental floss or alternatives: shared decision making (SDM)
- study transparency: tv team und independent colleagues from the University of Witten/Herdecke



Conclusions

AirFloss Ultra versus dental floss

- plaque removal: no differences
- prevention of gingivitis after 4 weeks of use: no differences
- adherence: patients perceive AirFloss Ultra as easy to handle
- AirFloss Ultra is particularly interesting for patients who do not (want to) use dental floss

Literature

- 1 Sambunjak D et al., "Flossing for the management of periodontal diseases and dental caries in adults (Review)", The Cochrane Library 2011, Issue 12
- 2 Berchier CE et al., "The efficacy of dental floss in addition to a toothbrush on plaque and parameters of gingival inflammation: a systematic review", Int J Dent Hygiene 6, 2008; 265-279
- 3 Staehle HJ, "Das aktive Mundgesundheitsverhalten in Deutschland und in der Schweiz [Active oral health behavior in Germany and Switzerland]", Schweizerische Monatsschrift Zahnmedizin 114, 2004; 1236-1251