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Kongress der Ernährung und Diätetik
Congrès de la nutrition et diététique

Mündliche Präsentationen:

Referatssprache Deutsch

EN: MEDPass versus conventional administration of oral nutritional supplements – a randomized controlled trial comparing coverage of energy and protein requirements

DE: MEDPass versus herkömmliche Verabreichung von Trinknahrung – Resultate der MEDPass Studie und deren Bedeutung für die Praxis

FR: Comparaison de MEDPass et de l'administration classique d'alimentation buvable – les résultats de l'étude MEDPass et leur importance pour la pratique

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Introduction:

Oral nutritional supplements (ONS) in inpatients are often used to reach protein and energy goals in patients at risk of malnutrition. Compliance with ONS can be challenging but may be improved by prescribing ONS in smaller portions with medication rounds (MEDPass). We compared the likelihood of meeting energy and protein requirements in patients receiving ONS with MEDPass versus conventional ONS administration.

Methods:

The MEDPass Trial is a randomized, controlled, open-label superiority trial conducted on medical and geriatric wards in a University Hospital in Switzerland. The MEDPass group received 50ml of ONS four times per day with the medication rounds. The control group received ONS per conventional care between the meals. The primary outcome was the percentage of energy in relation to the individual requirement. Secondary outcomes included the coverage of protein intake in relation to the individual requirement, the amount of daily consumed ONS, the course of handgrip strength (HGS), body weight (BW), appetite and nausea. Furthermore, we compared 30-day mortality and hospital length of stay was studied in medical patients.

Results:

From November 22nd, 2018 until November 30th, 2021, 204 patients were included in the trial (MEDPass group n=100, control group n=104). A total of 203 patients at nutritional risk were analyzed in the intention-to-treat analysis. Regarding the primary endpoint, there was no difference in the coverage of energy requirement between the MEDPass and control group (82 vs. 85% (Δ -3%, 95%CI -11 to 4%), p=0.38). Similarly, no differences were found for the



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secondary outcomes including coverage of protein requirement (101 vs. 104% (Δ -3%, 95% CI -12 -7%), $p=0.57$, average daily intake of ONS (170 vs 173 ml (Δ - 3 ml, 95% CI -14 to 8 ml), $p=0.58$) and 30-day mortality (3 vs. 8 patients, OR 0.4 (95% CI 0.1-1.4), $p=0.15$). The course of HGS, BW, appetite and nausea did not differ between the groups ($p=0.29$, $p=0.14$, $p=0.65$ and $p=0.94$, respectively). The per protocol analysis including 178 patients showed similar results.

Conclusion:

We found high compliance for ONS intake and high coverage of protein requirements but no further improvement when ONS was administered using MEDPass compared to conventional care. However, patient preferences need to be considered when deciding on an administration mode. Furthermore, MEDPass administration may provide an alternative that is easy to integrate into nursing routines, which may lead to lower workload with cost benefits and reduction of food waste.