

NON-NUTRITIONAL VARIABLES OF LONG TERM ENTERAL FEEDING IN INFANCY AND CHILDHOOD



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1. THEORETICAL BACKGROUND

During the last 20 years there has been an overall increase of enteral nutrition in all areas of pediatrics. Enteral nutrition has many advantages: life-sustaining function, provision of nutritional requirements in cases of impaired or impossible oral intake. There are also some disadvantages for which there is little evidence in literature. Common negative side-effects are psychological stress in the affected families, negative impact on general development through recurrent vomiting, retching, gagging, tube dislocations and other direct complications of the tubes. Thus, the present statistical analysis summarizes the most important non-nutritional side-effects of long-term enteral feeding in infancy and childhood of a total sample of 268 tube fed children.

2. AIM OF THE STUDY

Evaluation of non-nutritional side-effects in a sample of 268 tube fed children in 3 years.

3. METHOD

Retrospective statistical analysis of a parent documented medical questionnaire.

The questionnaire included questions about the following symptoms: nausea, sweating, no hunger, vomiting, retching, skin irritations, granulation tissue, gagging and description of other symptoms in an open response format. All Data was collected during 2009 and 2011 with ArchiMed (Version 4.62), the Medical University Clinic's documentary system. The data was evaluated by SPSS 18.0.

4. RESULTS

All patients were predominantly dependent on enteral nutrition. The mean age was 2,16 years. Most children came from Australia (19,8%), the USA (16%), Germany (14,6%), Austria (13,1%) and Great Britain (10,8%). 175 had a NG- and 93 a PEG- tube. **232 (87%) patients reported negative side-effects.** 55,6% of the patients described „gagging“, 52,6% „retching“, 48,9% „vomiting“, 44,4% „no hunger“, 13,4% „nausea“, 6,3% „sweating“, 5,2% „granulation tissue“. 1,5% developed „skin irritations“ and 29,1% manifested „other side-effects“ like food refusing, reflux, swallowing problems and food aversion.

5. CONCLUSION

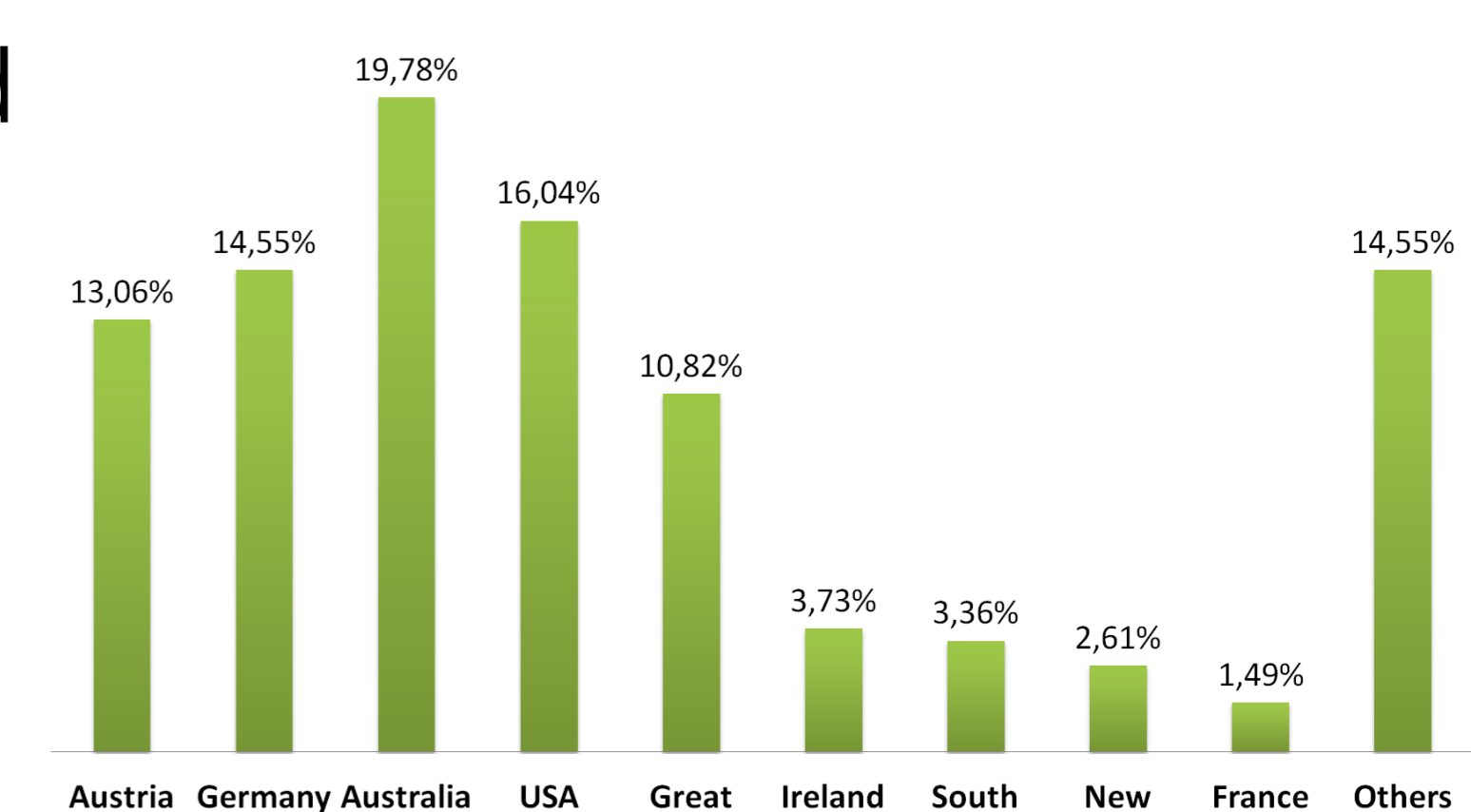
Almost every child in this sample showed at least two negative side-effects.

6. DISCUSSION

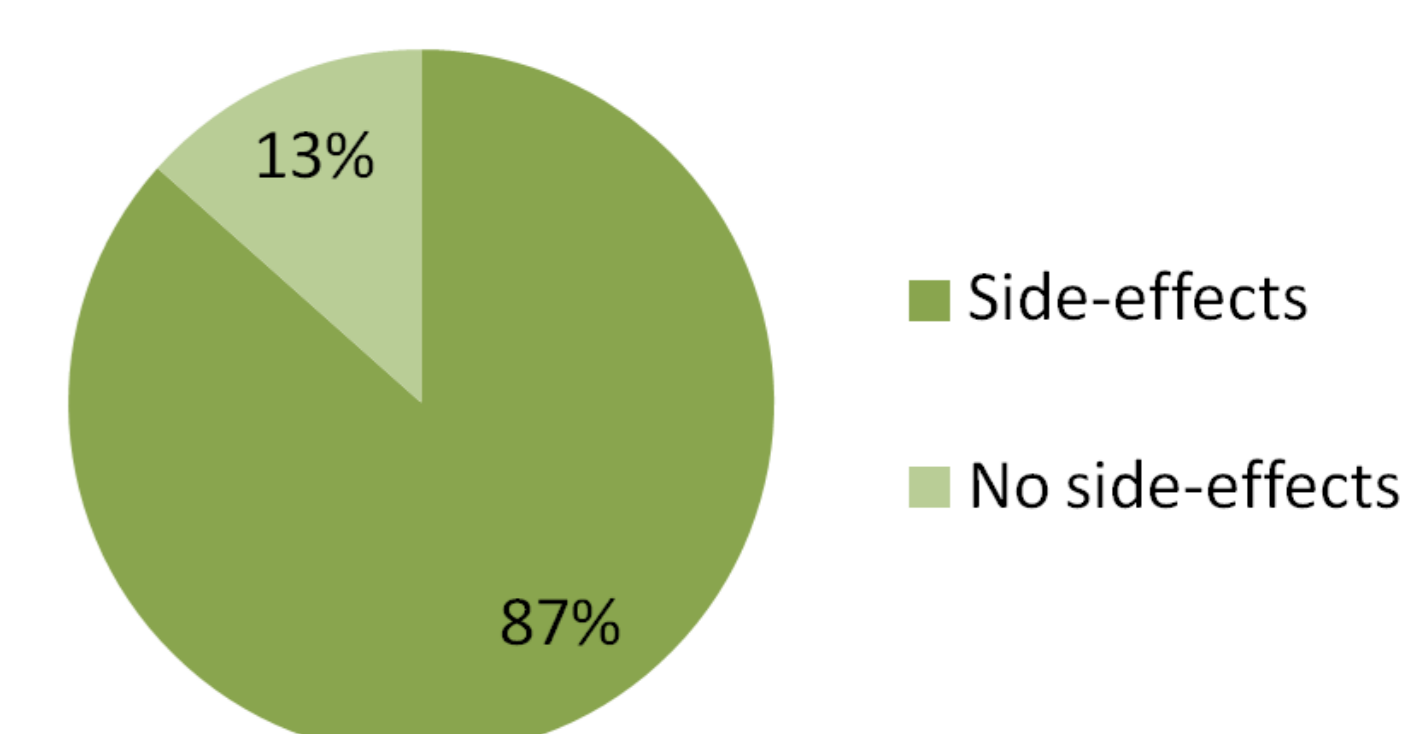
It is important to discuss the intended goals of temporary enteral feeding under consideration of possible negative side-effects, which might even outweigh the intended nutritional effect of the enteral feeding. There is also a need to define clear guidelines for maintenance and exit-strategies for temporarily tube fed children.



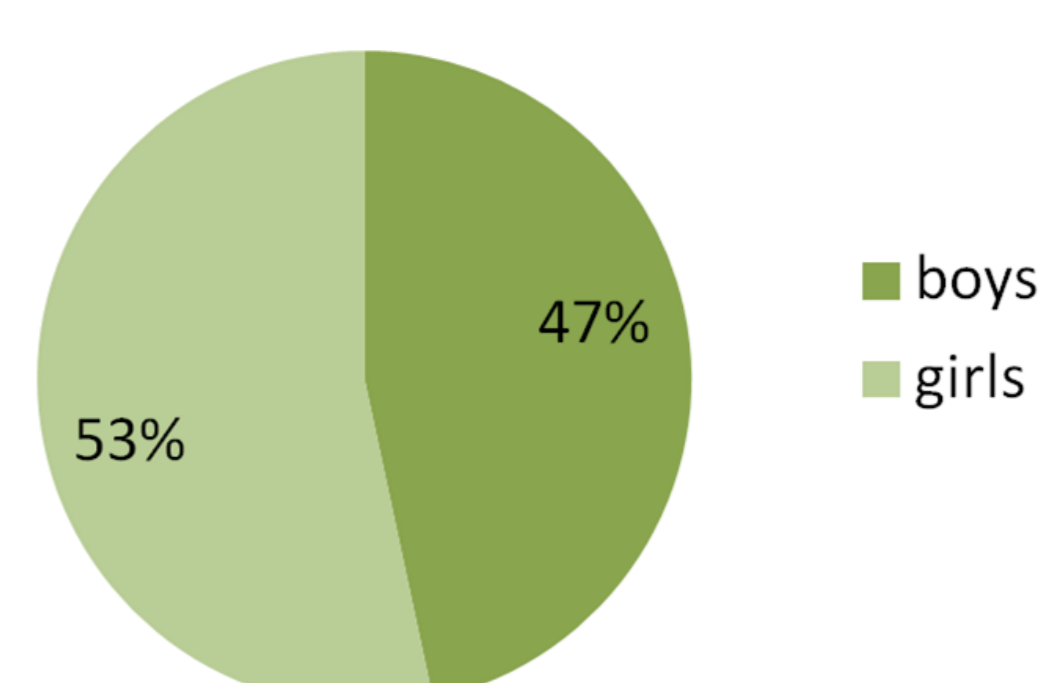
Country of Referral, n=268



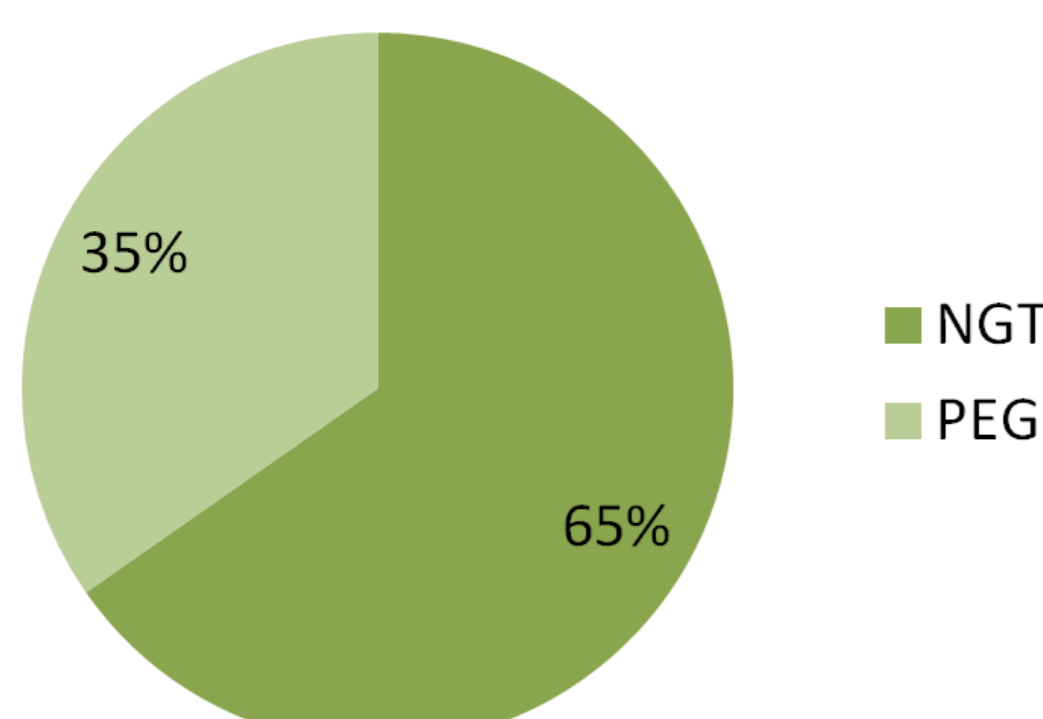
Overall side-effects, n=268



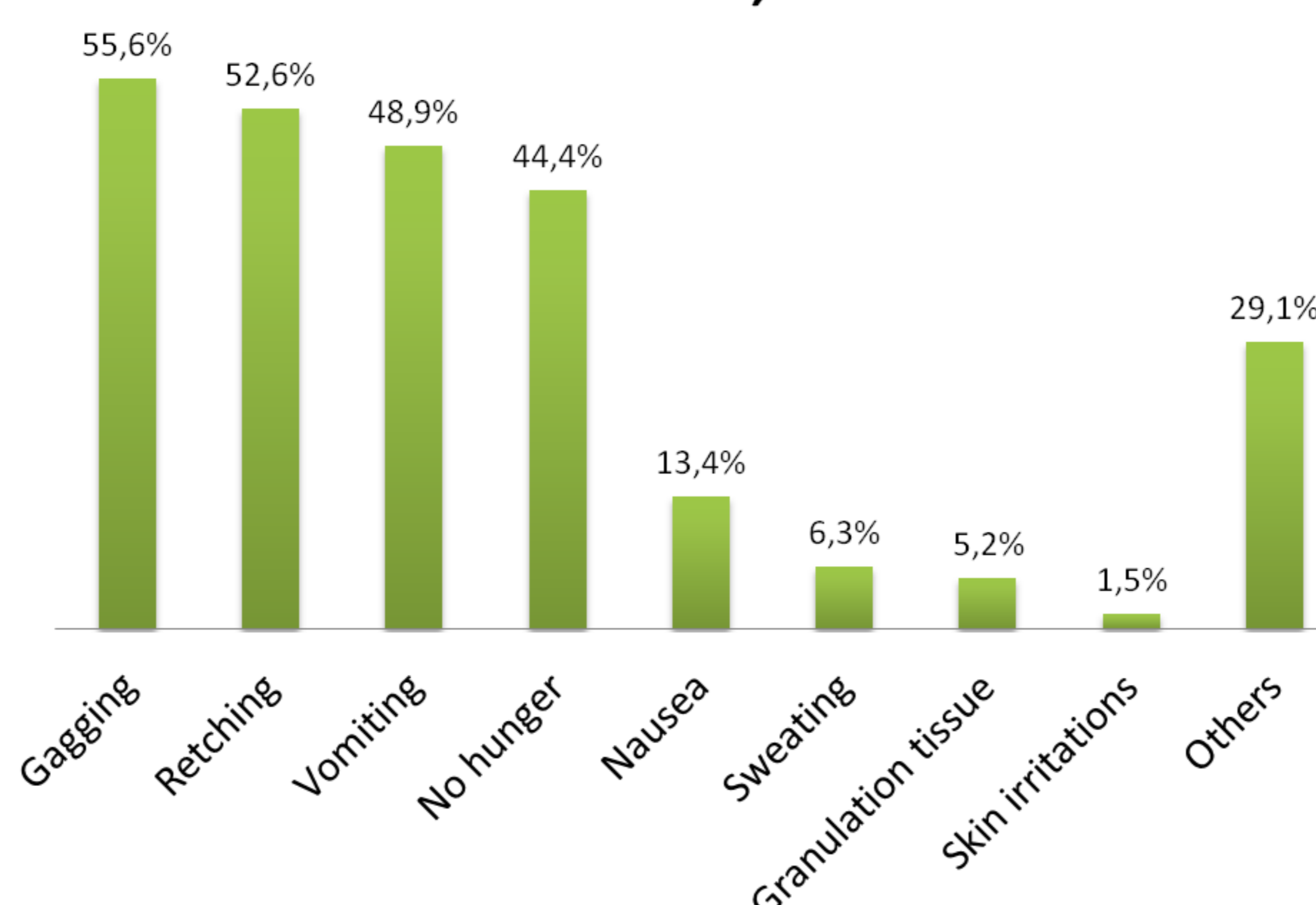
Gender, n=268



Tube, n=268



Side-effects, n=268



Mean Age (SD)	Min.	Max.
2,16 (2,11)	0,26	19,21

Reported Symptoms/patient	SD
2,57	1,73

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