Background and importance Enteral nutrition (EN) through a feeding tube is a frequent method of nutrition support in the hospital environment. This method of delivering nutrition is also commonly used for administering medications when patients cannot swallow safely. An incorrect administration may alter the efficacy and/or adverse effects of the drug, and could even compromise patient safety. 

Aim and objectives To detect potential medication errors in patients receiving EN and drugs at the same time by enteral feeding tube and to describe pharmaceutical interventions and acceptance rate.

Material and methods A prospective study was conducted in a tertiary level hospital between September and October 2019. All prescriptions of drugs administered by enteral feeding tube were assessed. Patient demographics, number of prescriptions analysed and administration data (route, pharmaceutical form) were collected. Pharmaceutical interventions were carried out through the validation programme and by telephone. The acceptance rate of the performed interventions was also evaluated.

Results Forty-eight patients with an enteral feeding tube were included, 27% were women and mean age was 61 years (range 32–85). A total of 174 prescriptions of drugs administered by tube were assessed and 37 medication errors were detected: 16.22% were drugs that cannot be administered by tube and 83.78% were physical incompatibilities between drugs and EN. A total of 46 interventions were performed. The interventions were: to avoid simultaneous administration of EN and medication (67.39%), to change pharmaceutical form (4.35%), to change the route of administration (8.52%), to propose a therapeutic alternative due to incompatibility between the medication and the tube (13.04%) and to advise the correct administration of hazardous drugs (8.70%). All of the interventions (100%) were accepted by doctors and nurses.

Conclusion and relevance Successful drug delivery through enteral feeding tubes requires careful selection and appropriate administration of drug dosage forms. Pharmacists play an important role in making recommendations about handling medications and selecting the most suitable pharmaceutical form to administer through an enteral tube. This leads to a reduction in the risk of medication errors, improving the effectiveness and safety of the treatment.