

PP-041 EXTEMPORANEOUS PREPARATION OF ORAL LIQUID FORMULATION OF CAPECITABINA

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BACKGROUND



Oncology patients often show swallowing problems or dysphagia. Dysphagia is a frequent syndrome in patients with tumours involving the central nervous system, head and neck, and the upper aerodigestive tract. This can be the initial symptom or related to the oncological treatment.

These patients may have difficulty with orally ingesting solid forms of drugs, semi-solids formulations are needed. In dysphagia, galenic formulations should be modified. Oncology pharmacists face a constant challenge with patients who cannot swallow oral drugs, by making extemporaneous oral liquid preparation a requirement for their treatment.

PURPOSE

To describe extemporaneous preparation of capecitabina oral liquid formulation.

MATERIAL AND METHODS



We performed a PubMed literature search (1966-May 2014) for all studies published in the English language by using the generic name of the identified drugs and following search terms: extemporaneous formulations, oral liquid or suspension, compounding, anticancer therapy, antineoplastic agent, stability pharmacokinetic, and bioavailability.

Drug



Capecitabina



Procedure

500 mg/5ml oral suspension can be prepared by crushing thirty-seven 500 mg capecitabine tablets (film coated) in a mortar, mixing the powder with approximately 92,5 ml of oral-plus (contains: carboxymethylcellulose sodium and xanthan gum as thickeners) 92,5 ml oral-sweet (contains: sucrose and sorbitol as excipient) (5 ml/ 500 mg) and stirring it 15 min.



Storage and stability

The United State Pharmacopoenia (USP) also provides a general guideline on stability and beyond-use dates for extemporaneously compounded prescriptions. For microbiology reasons, unless published data supports a longer expiration time, the beyond-use date for any water (oral sweet and oral plus-containing formulation prepared from ingredients in solid form) is limited to 2 weeks, and the liquid must be stored in a refrigerator.

RESULTS

The development of a national guideline to promote standards of practice in these non traditional setting may help us to improve the safety of dispensing and handling of oral chemotherapy, including extemporaneously compounded oral liquid formulations of the hazardous drugs.

CONCLUSION

The extemporaneous compounding preparation of oral formulation fills a gap in therapy when there are no commercial therapeutic alternatives.

