

## **Information on the pediatric patient**

No formal statement on the management of UGI bleeding in children was generated, because of a lack of high quality evidence; however, a brief narrative summary is provided.

In infants, children, and adolescents, non-variceal UGI bleeding occurs less commonly than in adults (1, 2). However, as with the adult patient, major UGI bleeding in the pediatric patient is a serious medical condition requiring prompt diagnosis and therapy. The infant and young child compensates for shock by developing tachycardia prior to becoming hypotensive. Hypotension is a late and ominous sign of shock in children. Resuscitation efforts must be instituted promptly because blood volume is limited and venous access can be difficult. Causes of non-variceal UGI bleeding in neonates, infants, and toddlers are unique and special pediatric equipment is required for diagnostic and therapeutic endoscopy (1-3). Toddlers and children up to 12 years of age metabolize intravenous and oral PPIs at a faster rate than adults (4-8), and optimal dosing strategies remain unstudied. Little information is available about the metabolism of PPIs in infants under one year of age. A discussion of the specific diagnosis and management of non-variceal UGI bleeding in infants and the young child is beyond the scope of this consensus statement and readers are referred to recent literature (1-3, 7, 8).

In the older child or adolescent, the causes of non-variceal UGI bleeding are generally similar to those in adult patients. However, due to the low prevalence of UGI bleeding in these age groups, data on therapeutic endoscopy are limited to case reports. Many of the hemostatic endoscopic techniques used in adult patients have been successfully used in children (1-3). Adolescents metabolize intravenous and oral PPIs in a manner similar to adults (4, 5, 9). Thus, in pediatric patients who weigh more than 40 kg (50<sup>th</sup> percentile for 12 year old males and females), the dosing regimen for adults can be used.

There is an urgent need for additional pediatric studies to evaluate the pharmacokinetics and acute efficacy of intravenous PPI therapy in the pediatric patient with non-variceal UGI

bleeding. Studies are also needed to compare the efficacy of various therapeutic endoscopy techniques in the pediatric patient.

### References:

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