



Indigo Carmine 0.4%

Indigo-5, 5'Disulfonate, Purified Water

Non-absorptive contrast stain for Chromoendoscopy (CE)

Indigo carmine is a contrast dye that neither reacts with nor is absorbed by the mucosa, but simply pools in the mucosal grooves and crevices, allowing better topographic definition.

Spray Catheter: During continuous extubation, indigo carmine (0.4%) is gently applied to achieve diffuse coverage of the entire mucosal surface. Only a small volume of dye is applied to avoid excess dye accumulation. Re-examine after excess dye has been aspirated. Indigo carmine is easily applied using a special dye-spray catheter. Prior application of acetic acid has also been used in the upper gastrointestinal tract in some studies

Foot Pump: Adequate colonic preparation quality is essential when using CE. The washing of residue during intubation thoroughly cleans the mucosa before the application of CE, and in turn improves the overall efficiency of the procedure. Once the cecum is reached and the mucosa is cleaned, exchange the water irrigation bottle for the dye solution, and initiate dye spraying. The diluted dye can then be sprayed onto the mucosa using a standard flushing pump attached to the scope, either through pressing a foot pedal or a programmed button on the endoscope handle. Direct the spray to the antigravity side of the colon in order to optimize the dye application to all of the colonic mucosa in an efficient manner.

Whilst the strength of the dye solution is determined by the user, industry preferences are 15mL 0.4% indigo carmine to 300mL of sterile water.

Injection for Polyp Delineation: To perform EMR a fluid is injected beneath the lesion to produce a sub-mucosal lift. A plasma expander is routinely used, as there is evidence to suggest that this lasts longer and leads to fewer resection pieces than saline. A small amount of adrenaline in the solution is used to avoid oozing and ensure a bloodless field. Indigo Carmine in the solution is used to stain the submucosa. The ideal solution should produce:

- 1) A long lasting high elevation
- 2) An avascular field
- 3) Good delineation of tissue planes



The ratio of Indigo Carmine in this formula can vary based on users' preference for colour contrast. Industry standards see the following used routinely: 500 mL Gelifusine, and 5 mL Indigo Carmine 0.4% + adrenaline as per manufacturers own dosage instruction PROTECT FROM LIGHT. Indigo Carmine should be stored in the dark, away from direct light, preferably in the original package.

Store at 20 to 25 degrees