

Argon plasma coagulation

Argon plasma coagulation or **APC** is a medical endoscopic procedure used primarily to control bleeding from certain lesions in the gastrointestinal tract, and also sometimes to debulk tumours in the case of patients for whom surgery is not recommended. It is administered during esophagogastroduodenoscopy or colonoscopy.

APC involves the use of a jet of ionized argon gas (plasma) that is directed through a probe passed through the endoscope. The probe is placed at some distance from the bleeding lesion, and argon gas is emitted then ionized by a high voltage discharge (approx 6kV)[1]. High-frequency electrical current is then conducted through the jet of gas, resulting in coagulation of the bleeding lesion on the other end of the jet. As no physical contact is made with the lesion, the procedure is safe, and can be used to treat bleeding in parts of the gastrointestinal tract with thin walls, such as the cecum. The depth of coagulation is usually only a few millimetres.

APC is used to treat the following conditions:

angiodysplasias, anywhere in the GI tract
gastric antral vascular ectasia, or watermelon stomach

colonic polyps, after polypectomy

radiation proctitis

esophageal cancer



Argon plasma coagulation administered via probe through the colonoscope at an angiodysplasia in the colon. The patient had multiple colonic angiodysplasias in the setting of aortic stenosis.