MANAGEMENT OF PATIENTS WITH ACUTE LOWER GASTROINTESTINAL BLEEDING

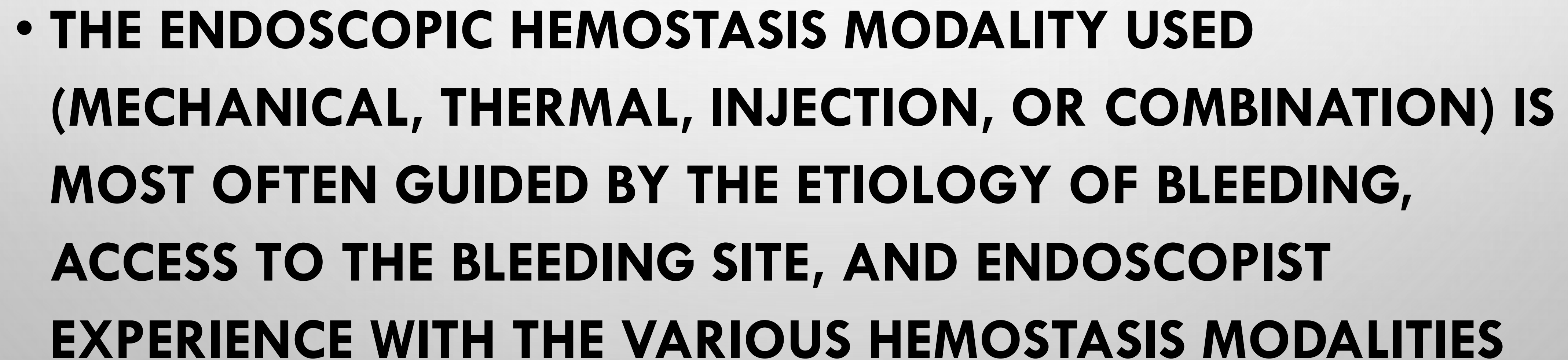
BY: REZA GHOLAMI

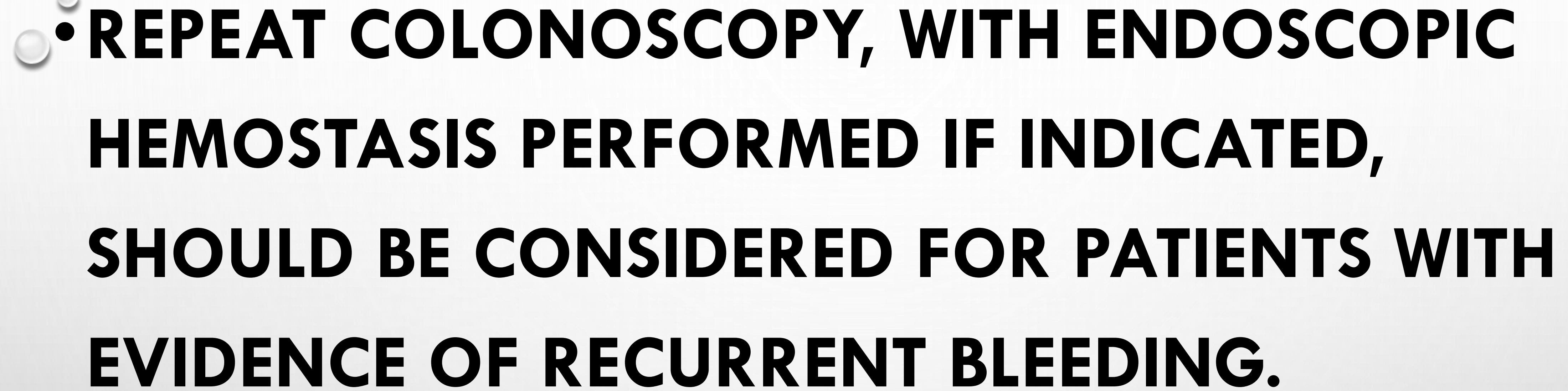
- THIS GUIDELINE PROVIDES RECOMMENDATIONS FOR THE MANAGEMENT OF PATIENTS WITH ACUTE OVERT LOWER GASTROINTESTINAL BLEEDING.
- HEMODYNAMIC STATUS SHOULD BE INITIALLY ASSESSED WITH INTRAVASCULAR VOLUME RESUSCITATION STARTED AS NEEDED.
- RISK STRATIFICATION BASED ON CLINICAL PARAMETERS SHOULD BE PERFORMED TO HELP DISTINGUISH PATIENTS AT HIGH- AND LOW-RISK OF ADVERSE OUTCOMES.

- **HEMATOCHEZIA ASSOCIATED WITH HEMODYNAMIC INSTABILITY MAY BE INDICATIVE OF AN UPPER GASTROINTESTINAL (GI) BLEEDING SOURCE AND THUS WARRANTS AN UPPER ENDOSCOPY.**

- **IN THE MAJORITY OF PATIENTS, COLONOSCOPY SHOULD BE THE INITIAL DIAGNOSTIC PROCEDURE AND SHOULD BE PERFORMED WITHIN 24 H OF PATIENT PRESENTATION AFTER ADEQUATE COLON PREPARATION.**

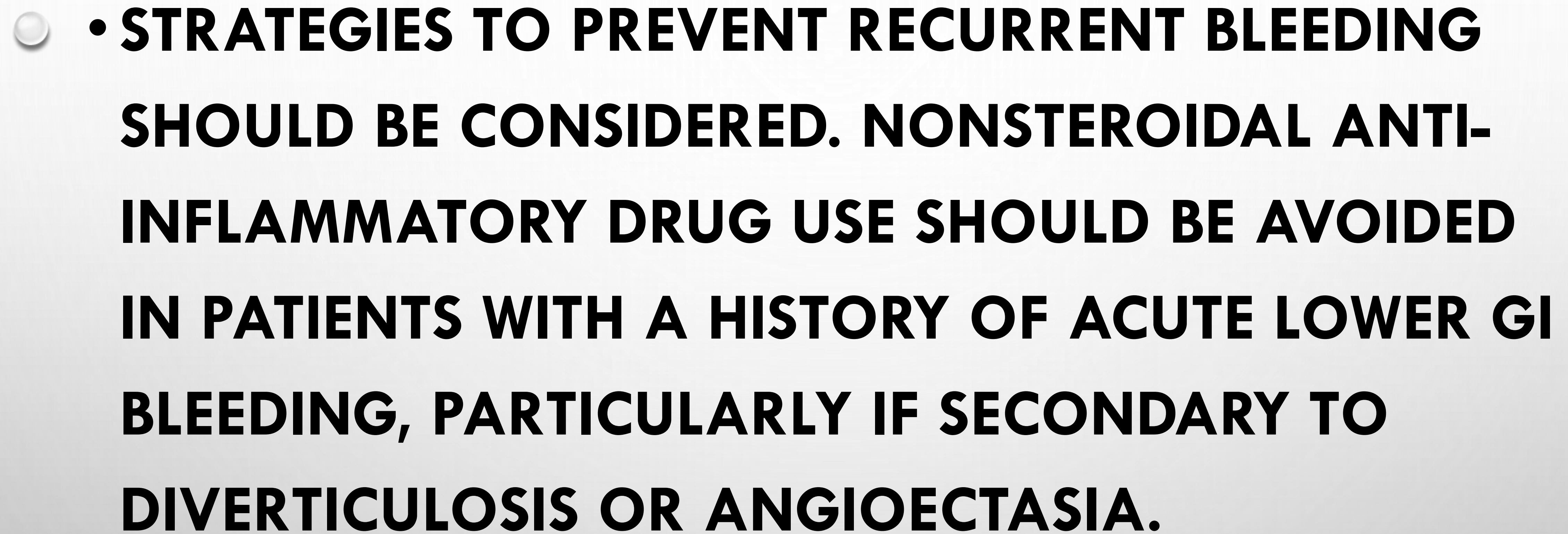
• ENDOSCOPIC HEMOSTASIS THERAPY SHOULD BE PROVIDED TO PATIENTS WITH HIGH-RISK ENDOSCOPIC STIGMATA OF BLEEDING INCLUDING ACTIVE BLEEDING, NON-BLEEDING VISIBLE VESSEL, OR ADHERENT CLOT.


• THE ENDOSCOPIC HEMOSTASIS MODALITY USED (MECHANICAL, THERMAL, INJECTION, OR COMBINATION) IS MOST OFTEN GUIDED BY THE ETIOLOGY OF BLEEDING, ACCESS TO THE BLEEDING SITE, AND ENDOSCOPIST EXPERIENCE WITH THE VARIOUS HEMOSTASIS MODALITIES



- REPEAT COLONOSCOPY, WITH ENDOSCOPIC HEMOSTASIS PERFORMED IF INDICATED, SHOULD BE CONSIDERED FOR PATIENTS WITH EVIDENCE OF RECURRENT BLEEDING.

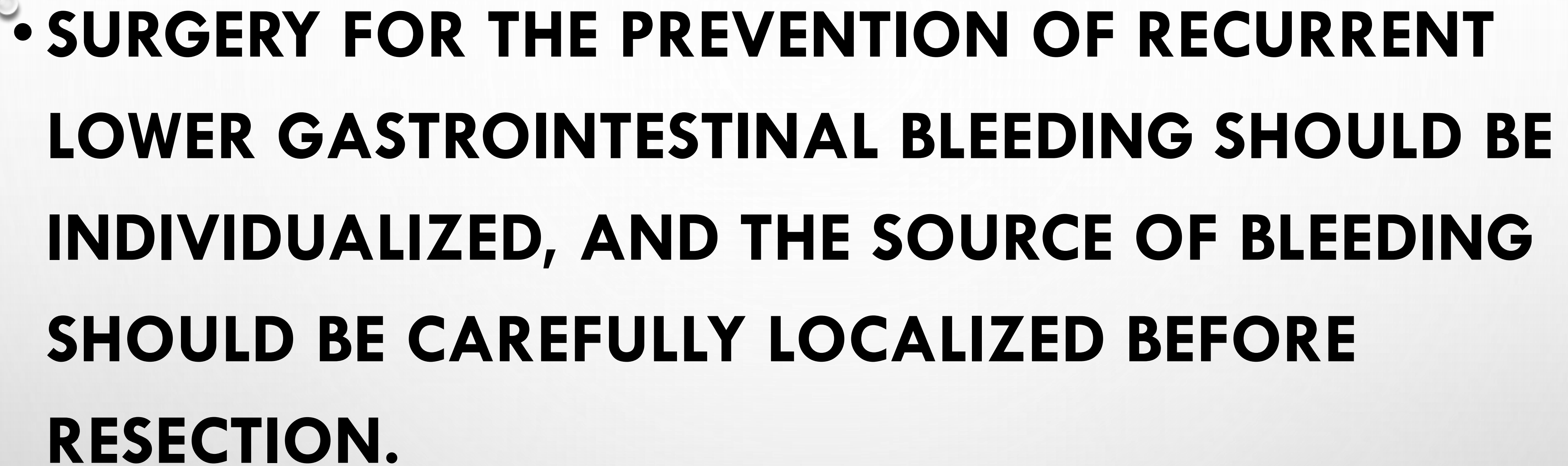
- RADIOGRAPHIC INTERVENTIONS (TAGGED RED BLOOD CELL SCINTIGRAPHY, COMPUTED TOMOGRAPHIC ANGIOGRAPHY, AND ANGIOGRAPHY) SHOULD BE CONSIDERED IN HIGH-RISK PATIENTS WITH ONGOING BLEEDING WHO DO NOT RESPOND ADEQUATELY TO RESUSCITATION AND WHO ARE UNLIKELY TO TOLERATE BOWEL PREPARATION AND COLONOSCOPY.

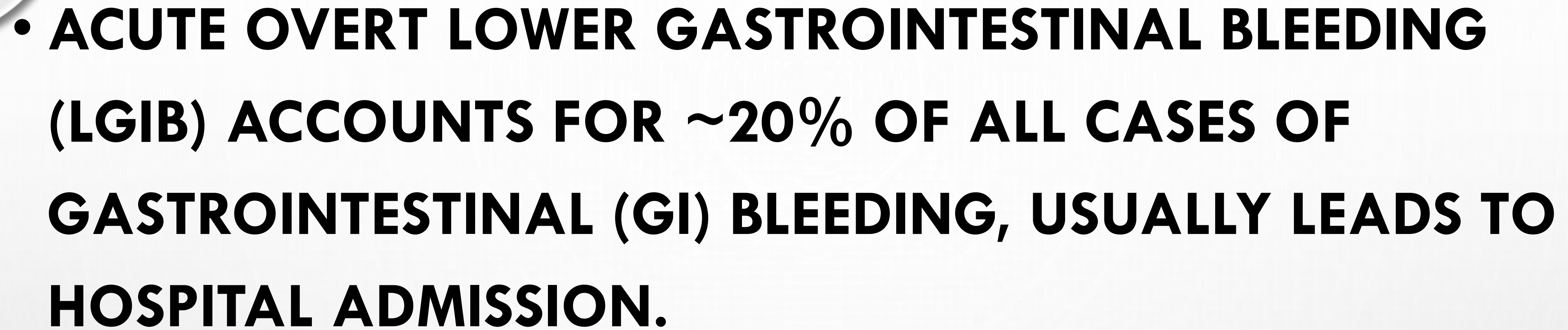


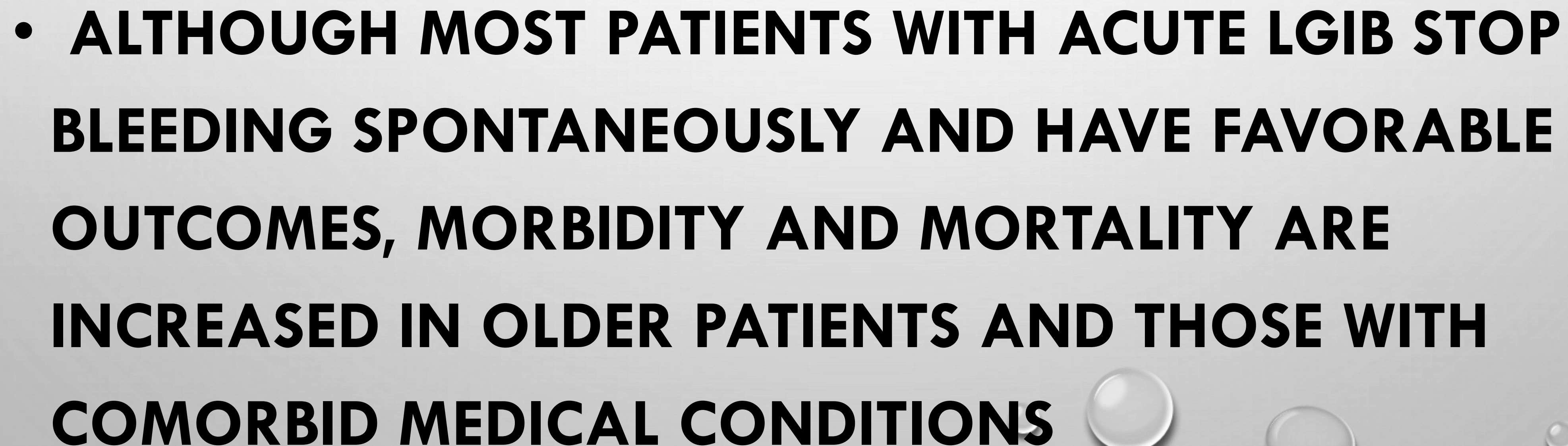
• STRATEGIES TO PREVENT RECURRENT BLEEDING SHOULD BE CONSIDERED. NONSTEROIDAL ANTI-INFLAMMATORY DRUG USE SHOULD BE AVOIDED IN PATIENTS WITH A HISTORY OF ACUTE LOWER GI BLEEDING, PARTICULARLY IF SECONDARY TO DIVERTICULOSIS OR ANGIOECTASIA.

- PATIENTS WITH ESTABLISHED CARDIOVASCULAR DISEASE WHO REQUIRE ASPIRIN (SECONDARY PROPHYLAXIS) SHOULD GENERALLY RESUME ASPIRIN AS SOON AS POSSIBLE AFTER BLEEDING CEASES AND AT LEAST WITHIN 7 DAYS.

- THE EXACT TIMING DEPENDS ON THE SEVERITY OF BLEEDING, PERCEIVED ADEQUACY OF HEMOSTASIS, AND THE RISK OF A THROMBOEMBOLIC EVENT.

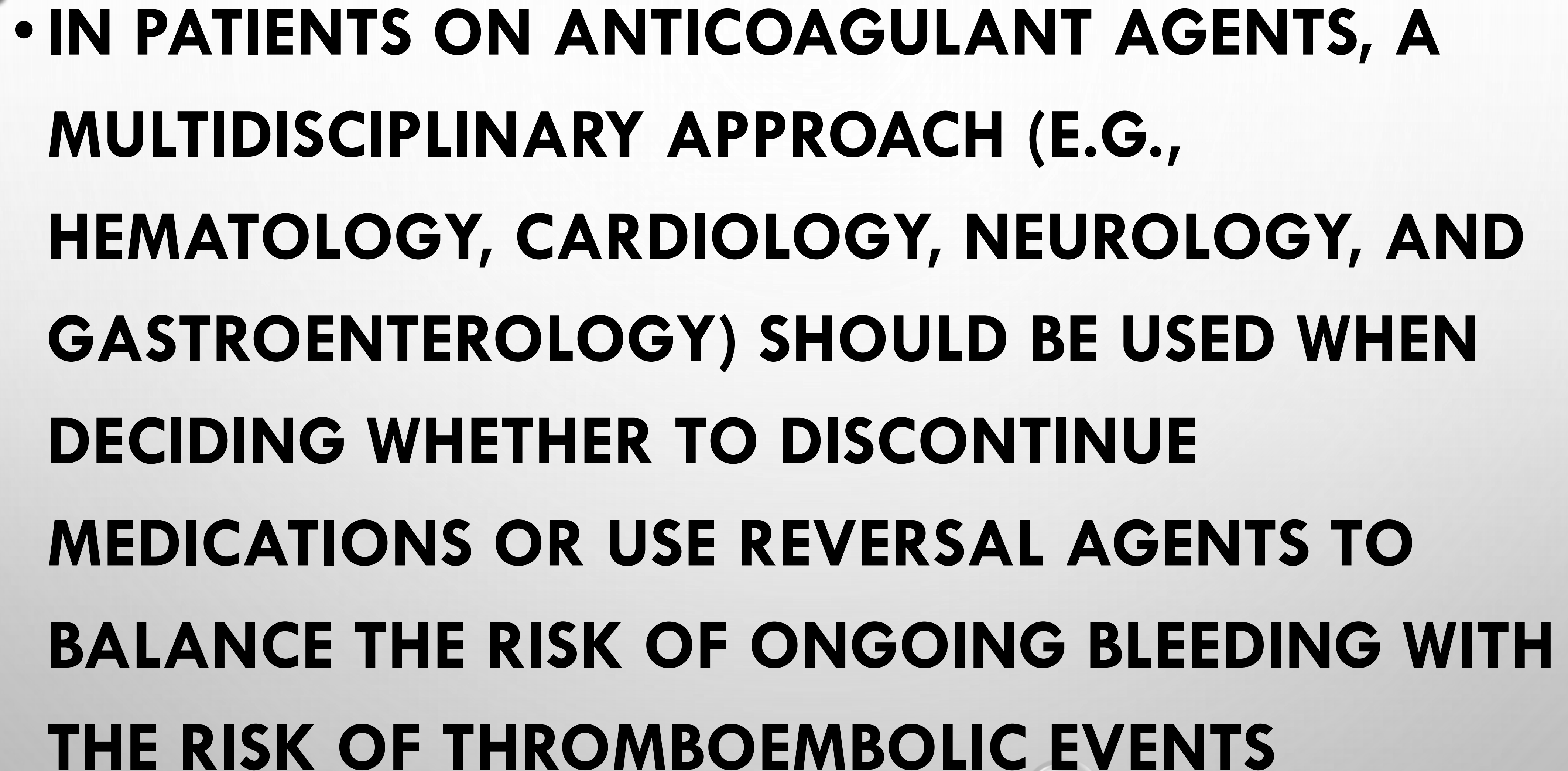

• SURGERY FOR THE PREVENTION OF RECURRENT LOWER GASTROINTESTINAL BLEEDING SHOULD BE INDIVIDUALIZED, AND THE SOURCE OF BLEEDING SHOULD BE CAREFULLY LOCALIZED BEFORE RESECTION.


• ACUTE OVERT LOWER GASTROINTESTINAL BLEEDING (LGIB) ACCOUNTS FOR ~20% OF ALL CASES OF GASTROINTESTINAL (GI) BLEEDING, USUALLY LEADS TO HOSPITAL ADMISSION.

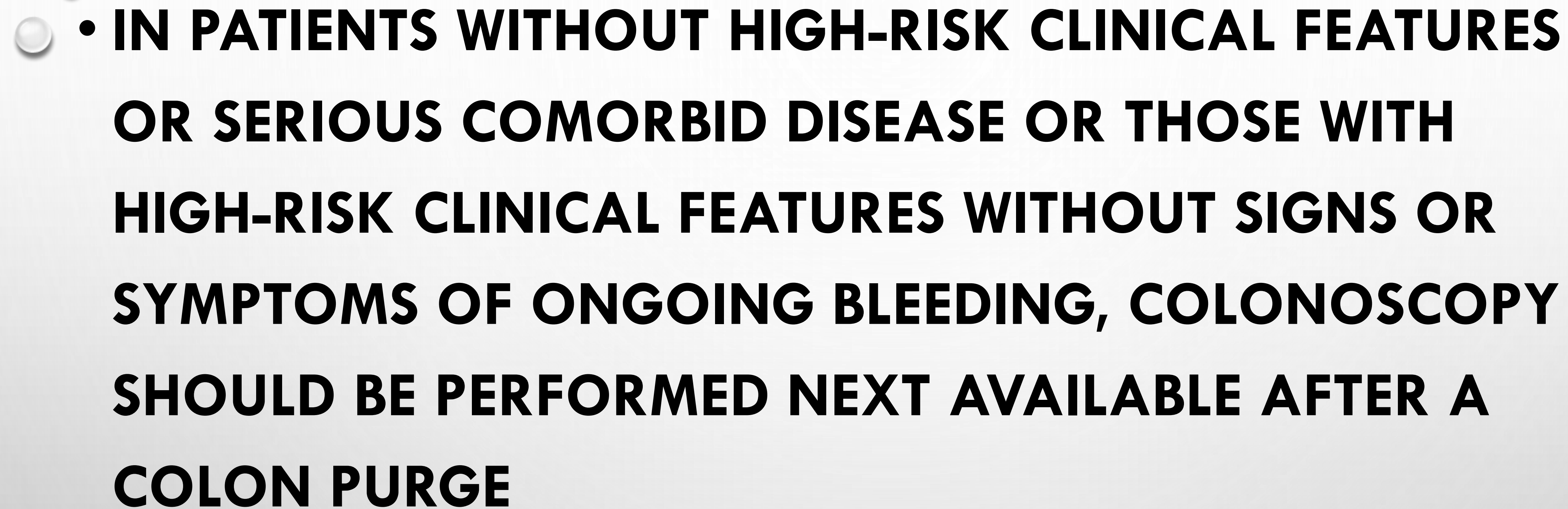

• ALTHOUGH MOST PATIENTS WITH ACUTE LGIB STOP BLEEDING SPONTANEOUSLY AND HAVE FAVORABLE OUTCOMES, MORBIDITY AND MORTALITY ARE INCREASED IN OLDER PATIENTS AND THOSE WITH COMORBID MEDICAL CONDITIONS

- ENDOSCOPIC HEMOSTASIS MAY BE CONSIDERED IN PATIENTS WITH AN INR OF 1.5–2.5 BEFORE OR CONCOMITANT WITH THE ADMINISTRATION OF REVERSAL AGENTS. REVERSAL AGENTS SHOULD BE CONSIDERED BEFORE ENDOSCOPY IN PATIENTS WITH AN INR >2.5

- PLATELET TRANSFUSION SHOULD BE CONSIDERED TO MAINTAIN A PLATELET COUNT OF 50 × 10/L IN PATIENTS WITH SEVERE BLEEDING AND THOSE REQUIRING ENDOSCOPIC HEMOSTASIS

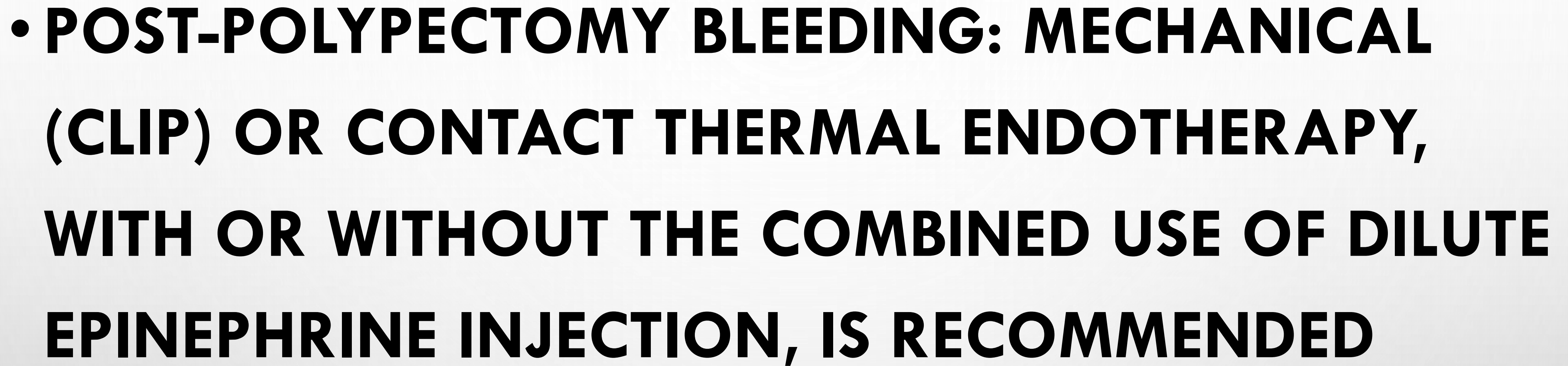

• IN PATIENTS ON ANTICOAGULANT AGENTS, A MULTIDISCIPLINARY APPROACH (E.G., HEMATOLOGY, CARDIOLOGY, NEUROLOGY, AND GASTROENTEROLOGY) SHOULD BE USED WHEN DECIDING WHETHER TO DISCONTINUE MEDICATIONS OR USE REVERSAL AGENTS TO BALANCE THE RISK OF ONGOING BLEEDING WITH THE RISK OF THROMBOEMBOLIC EVENTS

- IN PATIENTS WITH HIGH-RISK CLINICAL FEATURES AND SIGNS OR SYMPTOMS OF ONGOING BLEEDING, A RAPID BOWEL PURGE SHOULD BE INITIATED FOLLOWING HEMODYNAMIC RESUSCITATION AND A COLONOSCOPY PERFORMED WITHIN 24 H OF PATIENT PRESENTATION AFTER ADEQUATE COLON PREPARATION TO POTENTIALLY IMPROVE DIAGNOSTIC AND THERAPEUTIC YIELD

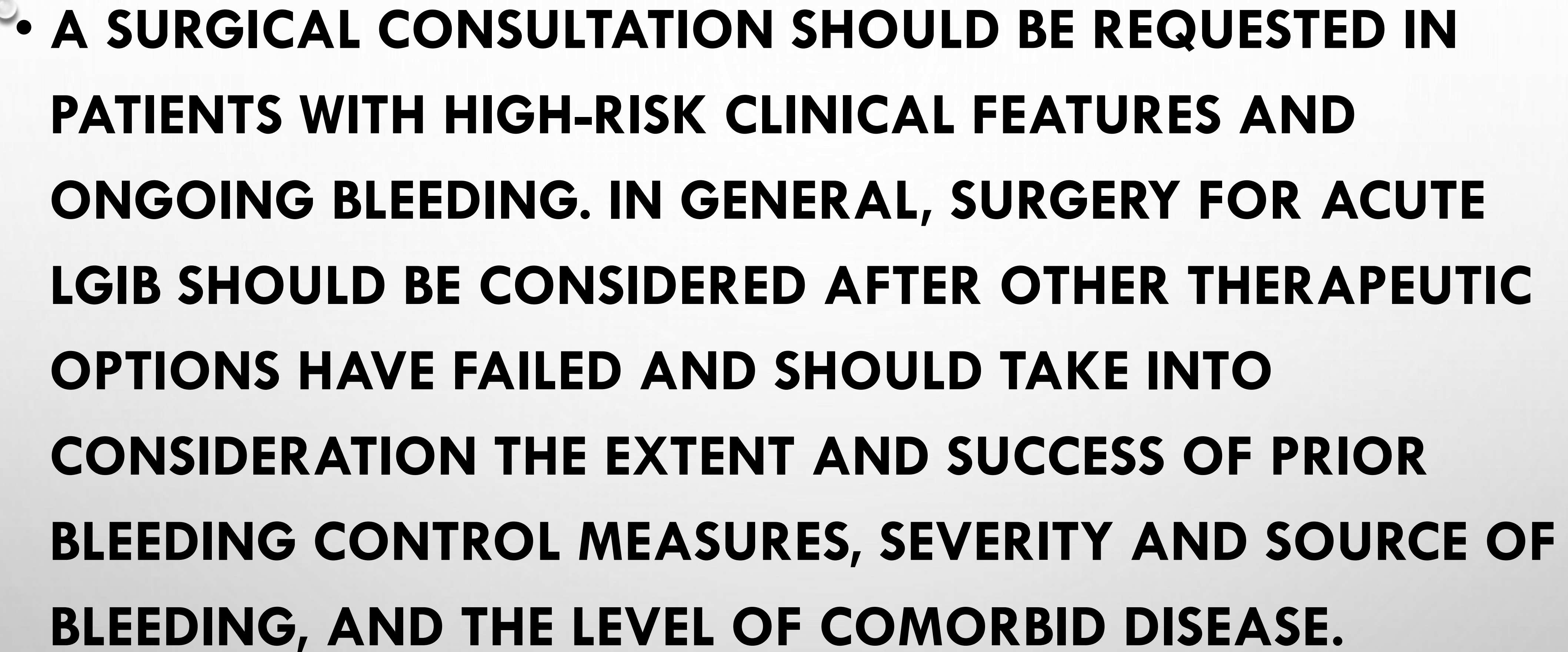

• IN PATIENTS WITHOUT HIGH-RISK CLINICAL FEATURES OR SERIOUS COMORBID DISEASE OR THOSE WITH HIGH-RISK CLINICAL FEATURES WITHOUT SIGNS OR SYMPTOMS OF ONGOING BLEEDING, COLONOSCOPY SHOULD BE PERFORMED NEXT AVAILABLE AFTER A COLON PURGE

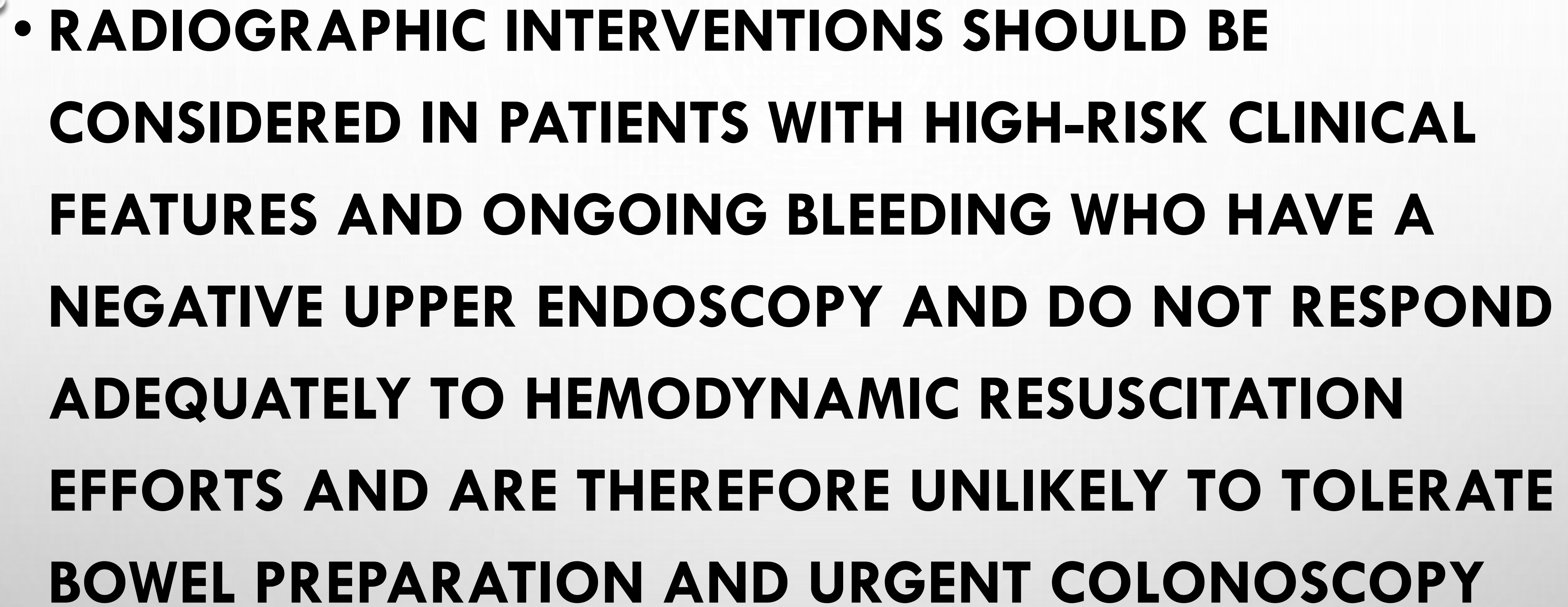
- **DIVERTICULAR BLEEDING: THROUGH-THE-SCOPE ENDOSCOPIC CLIPS ARE RECOMMENDED AS CLIPS MAY BE SAFER IN THE COLON THAN CONTACT THERMAL THERAPY AND ARE GENERALLY EASIER TO PERFORM THAN BAND LIGATION, PARTICULARLY FOR RIGHT-SIDED COLON LESIONS**

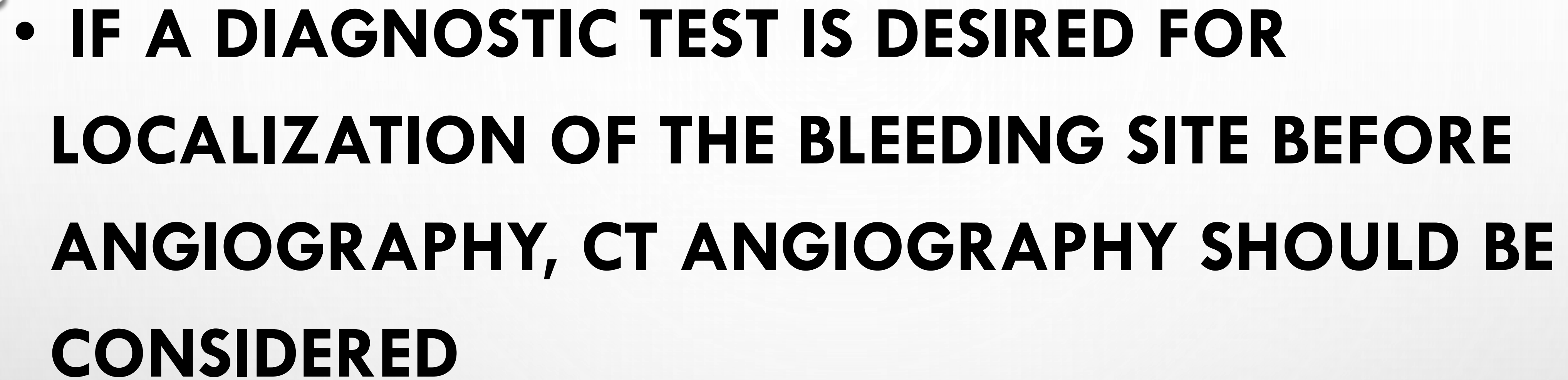
- **ANGIOECTASIA BLEEDING: NONCONTACT THERMAL THERAPY USING ARGON PLASMA COAGULATION IS RECOMMENDED**


• POST-POLYPECTOMY BLEEDING: MECHANICAL (CLIP) OR CONTACT THERMAL ENDOTHERAPY, WITH OR WITHOUT THE COMBINED USE OF DILUTE EPINEPHRINE INJECTION, IS RECOMMENDED

- EPINEPHRINE INJECTION THERAPY (1:10,000 OR 1:20,000 DILUTION WITH SALINE) CAN BE USED TO GAIN INITIAL CONTROL OF AN ACTIVE BLEEDING LESION AND IMPROVE VISUALIZATION BUT SHOULD BE USED IN COMBINATION WITH A SECOND HEMOSTASIS MODALITY INCLUDING MECHANICAL OR CONTACT THERMAL THERAPY TO ACHIEVE DEFINITIVE HEMOSTASIS


• A SURGICAL CONSULTATION SHOULD BE REQUESTED IN PATIENTS WITH HIGH-RISK CLINICAL FEATURES AND ONGOING BLEEDING. IN GENERAL, SURGERY FOR ACUTE LGIB SHOULD BE CONSIDERED AFTER OTHER THERAPEUTIC OPTIONS HAVE FAILED AND SHOULD TAKE INTO CONSIDERATION THE EXTENT AND SUCCESS OF PRIOR BLEEDING CONTROL MEASURES, SEVERITY AND SOURCE OF BLEEDING, AND THE LEVEL OF COMORBID DISEASE.


• RADIOGRAPHIC INTERVENTIONS SHOULD BE CONSIDERED IN PATIENTS WITH HIGH-RISK CLINICAL FEATURES AND ONGOING BLEEDING WHO HAVE A NEGATIVE UPPER ENDOSCOPY AND DO NOT RESPOND ADEQUATELY TO HEMODYNAMIC RESUSCITATION EFFORTS AND ARE THEREFORE UNLIKELY TO TOLERATE BOWEL PREPARATION AND URGENT COLONOSCOPY


• IF A DIAGNOSTIC TEST IS DESIRED FOR LOCALIZATION OF THE BLEEDING SITE BEFORE ANGIOGRAPHY, CT ANGIOGRAPHY SHOULD BE CONSIDERED

NON-ASPIRIN NSAID USE SHOULD BE AVOIDED IN PATIENTS WITH A HISTORY OF ACUTE LGIB, PARTICULARLY IF SECONDARY TO DIVERTICULOSIS OR ANGIOECTASIA

- IN PATIENTS WITH ESTABLISHED HIGH-RISK CARDIOVASCULAR DISEASE AND A HISTORY OF LGIB, ASPIRIN USED FOR SECONDARY PREVENTION SHOULD NOT BE DISCONTINUED. ASPIRIN FOR PRIMARY PREVENTION OF CARDIOVASCULAR EVENTS SHOULD BE AVOIDED IN MOST PATIENTS WITH LGIB

- IN PATIENTS ON DUAL ANTIPLATELET THERAPY OR MONOTHERAPY WITH NON-ASPIRIN ANTIPLATELET AGENTS (THIENOPYRIDINE), NON-ASPIRIN ANTIPLATELET THERAPY SHOULD BE RESUMED AS SOON AS POSSIBLE AND AT LEAST WITHIN 7 DAYS BASED ON MULTIDISCIPLINARY ASSESSMENT OF CARDIOVASCULAR AND GI RISK AND THE ADEQUACY OF ENDOSCOPIC THERAPY (AS ABOVE, ASPIRIN USE SHOULD NOT BE DISCONTINUED).

- HOWEVER, DUAL ANTIPLATELET THERAPY SHOULD NOT BE DISCONTINUED IN PATIENTS WITH AN ACUTE CORONARY SYNDROME WITHIN THE PAST 90 DAYS OR CORONARY STENTING WITHIN THE PAST 30 DAYS

Table 2. Risk factors for poor outcome in patients with LGIB

Study	Risk factor	Odds ratio	95% CI
Kollef *et al.*[a] (14)	Continuing hemorrhage	3.1	2.4–4.1
	Systolic blood pressure <100 mm Hg	3.0	2.2–4.1
	Prothrombin time >1.2 control	2.0	1.5–2.6
	Altered mental status	3.2	1.5–6.8
	Unstable comorbid illness[b]	2.9	1.9–4.4
Strate *et al.* (15, 16)	Heart rate >100 b.p.m.	3.7	1.8–7.6
	Systolic blood pressure <115 mm Hg	3.5	1.5–7.7
	Syncope	2.8	1.1–7.5
	Non-tender abdomen	2.4	1.2–4.9
	Bleeding in first 4 h of hospitalization	2.3	1.3–4.2

	Aspirin use	2.1	1.1–3.8
	>2 comorbid conditions[c]	1.9	1.1–3.4
Velayos *et al.* (17)	Initial hematocrit <35%	6.3	2.2–16.7
	Abnormal vital signs after 1 h	4.3	1.4–12.5
	Gross blood on initial rectal exam	3.9	1.2–13.2
Newman *et al.*[d] (18)	Hematocrit <35%	4.7	1.7–13.0
	Bright red rectal bleeding	3.5	1.7–7.1
	Age >60 years	2.3	1.05–4.9
Newman *et al.*[e] (18)	Creatinine > 150 μM	10.3	2.4–43.5
	Age >60 years	4.2	1.8–10.0
	Abnormal hemodynamic parameters	2.1	1.0–4.6
	Rebleeding	1.9	1.0–3.8
	Smoking	0.5	0.2–1.0

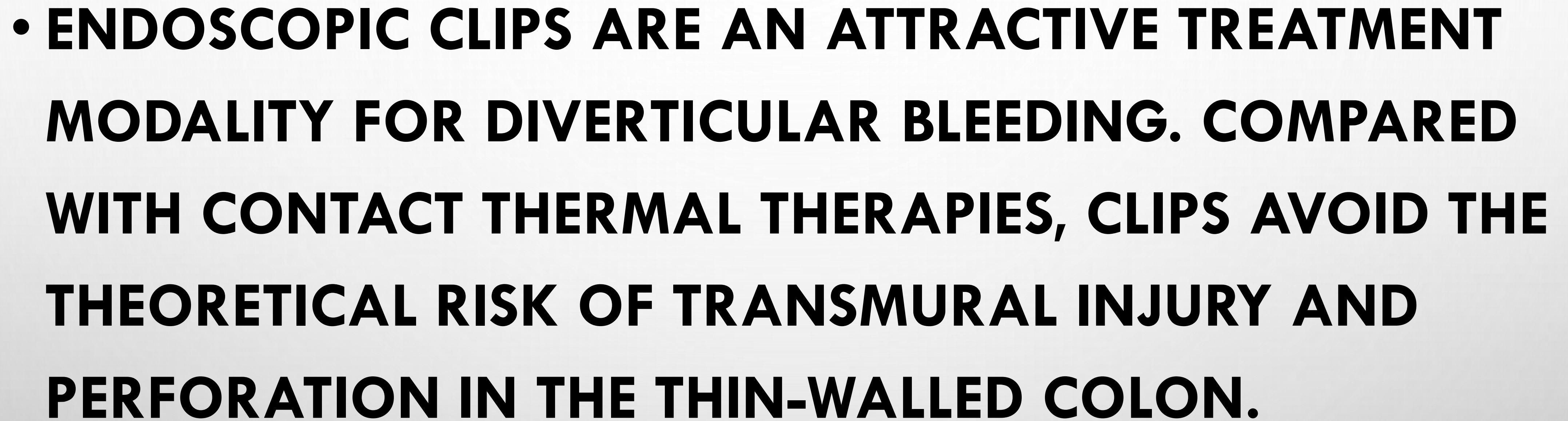
- *DIVERTICULAR HEMORRHAGE.* DIVERTICULAR BLEEDING IS ARTERIAL, TYPICALLY PRESENTS AS PAINLESS HEMATOCHEZIA, AND USUALLY OCCURS FROM EITHER THE NECK OR THE DOME OF THE DIVERTICULUM.

- PATIENTS WITH DIVERTICULAR BLEEDING ARE CANDIDATES FOR ENDOSCOPIC TREATMENT IF ACTIVE BLEEDING (SPURTING OR OOZING), A NON-BLEEDING VISIBLE VESSEL, OR AN ADHERENT CLOT (THAT CANNOT BE REMOVED WITH VIGOROUS WASHING AND SUCTIONING) IS FOUND AT THE TIME OF COLONOSCOPY

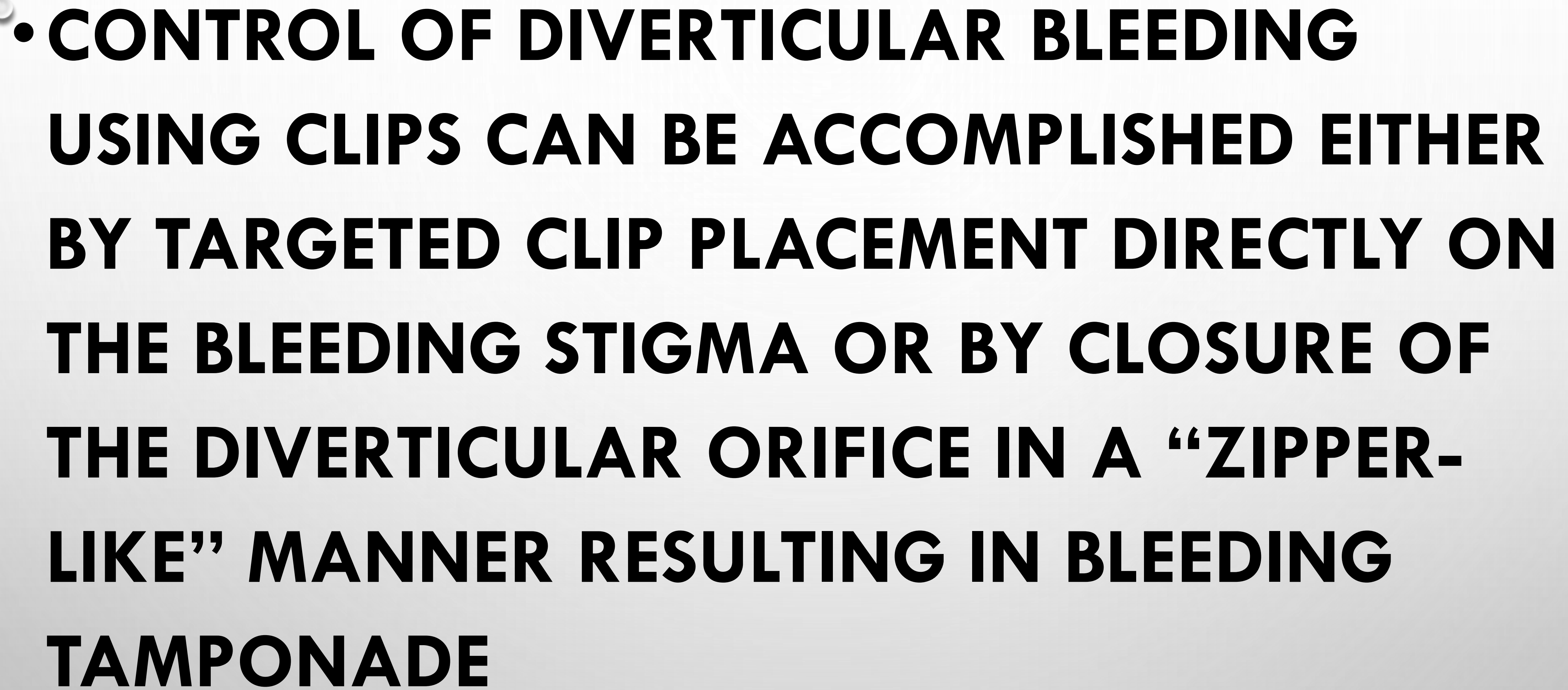
- JENSEN *ET AL*. REPORTED A PROSPECTIVE CASE SERIES OF 10 PATIENTS PRESENTING WITH SEVERE HEMATOCHEZIA FOUND TO BE FROM A DEFINITIVE DIVERTICULAR SOURCE AT THE TIME OF URGENT COLONOSCOPY.
- ENDOSCOPIC TREATMENTS INCLUDED INJECTION OF DILUTE EPINEPHRINE (1:20,000 ADMIXTURE WITH SALINE, IN 1 OR 2 ML ALIQUOTS PER INJECTION IN FOUR QUADRANTS), AS MONOTHERAPY FOR PATIENTS WITH ACTIVE BLEEDING (*N*=5), AND BIPOLAR THERMAL COAGULATION (USING 10–15 W WITH MODERATE APPOSITIONAL PRESSURE APPLIED IN 1-S INTERVALS UNTIL VESSEL FLATTENING WAS ACHIEVED) FOR THOSE WITH A NON-BLEEDING VISIBLE VESSEL (*N*=2).

- FOR PATIENTS WITH AN ADHERENT CLOT (*N*=3), DILUTE EPINEPHRINE WAS INJECTED CIRCUMFERENTIALLY AROUND THE SITE OF BLEEDING, THE CLOT WAS REMOVED USING A COLON POLYP SNARE, AND ANY UNDERLYING STIGMATA WERE TREATED WITH BIPOLAR THERMAL COAGULATION AS DESCRIBED ABOVE

- NONE OF THE 10 PATIENTS TREATED ENDOSCOPICALLY HAD RECURRENT BLEEDING OR REQUIRED SURGERY.


• ENDOSCOPIC CLIPS ARE AN ATTRACTIVE TREATMENT MODALITY FOR DIVERTICULAR BLEEDING. COMPARED WITH CONTACT THERMAL THERAPIES, CLIPS AVOID THE THEORETICAL RISK OF TRANSMURAL INJURY AND PERFORATION IN THE THIN-WALLED COLON.

- IN ADDITION, IMPROVED CLIP DESIGN INCLUDING GREATER TENSILE STRENGTH AND THE ABILITY TO ROTATE AND OPEN/CLOSE THE CLIP BEFORE DEPLOYMENT HAS MADE CLIPS EASIER TO USE FOR BLEEDING CONTROL


• CONTROL OF DIVERTICULAR BLEEDING USING CLIPS CAN BE ACCOMPLISHED EITHER BY TARGETED CLIP PLACEMENT DIRECTLY ON THE BLEEDING STIGMA OR BY CLOSURE OF THE DIVERTICULAR ORIFICE IN A "ZIPPER-LIKE" MANNER RESULTING IN BLEEDING TAMPONADE

- WHEN ACTIVE BLEEDING IS PRESENT, DILUTE EPINEPHRINE (0.5–2 ML PER INJECTION) CAN BE INJECTED IN OR AROUND THE DIVERTICULUM TO SLOW BLEEDING, IMPROVE VISIBILITY, AND FACILITATE CLIP PLACEMENT

- IN THE SETTING OF A SMALL OR DEEP BLEEDING DIVERTICULUM, A TRANSLUCENT CAP CAN BE PLACED ONTO THE TIP OF THE COLONOSCOPE, ENABLING EVERSION OF THE DIVERTICULUM FOR MORE PRECISE LOCALIZATION AND TREATMENT OF THE BLEEDING LESION

- MOREOVER, INJECTION CAN ALSO BE USED TO EVERT THE DOME OF THE DIVERTICULUM AND IMPROVE ACCESS TO THE BLEEDING SITE FOLLOWED BY CLIP PLACEMENT

- IN THE AFOREMENTIONED POOLED ANALYSIS BY STRATE AND NAUMANN, NO EARLY REBLEEDING WAS REPORTED AFTER ENDOSCOPIC CLIPPING OF DIVERTICULAR BLEEDING; HOWEVER, LATE REBLEEDING OCCURRED IN 17%

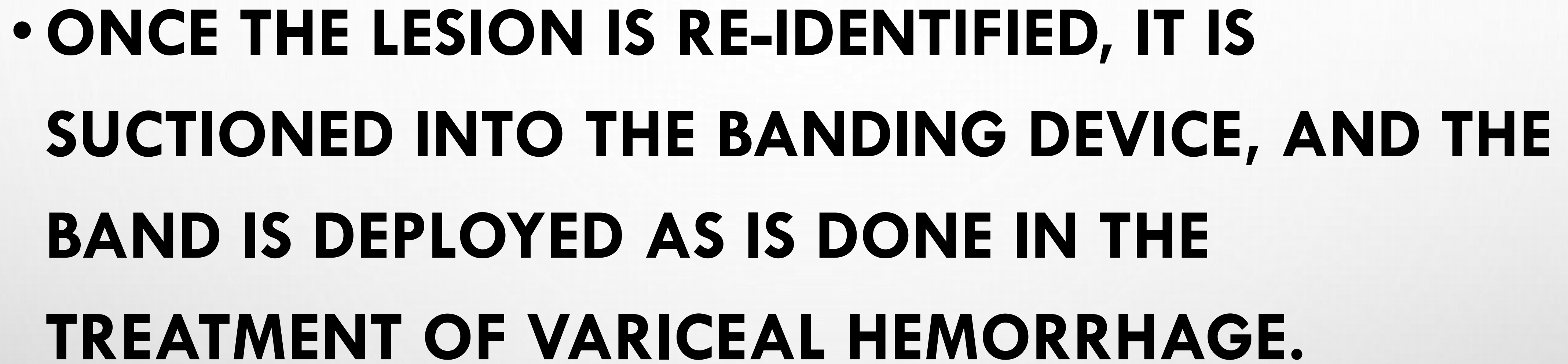
- MORE RECENTLY, IN A RETROSPECTIVE CASE SERIES FROM TWO VETERANS AFFAIRS HOSPITALS, KALTENBACH REPORTED ON THE SHORT- AND LONG-TERM OUTCOMES OF ENDOSCOPIC CLIPPING IN 24 PATIENTS WITH DEFINITIVE DIVERTICULAR HEMORRHAGE.

- SUCCESSFUL ENDOSCOPIC HEMOSTASIS WAS ACHIEVED IN 21 (88%) USING CLIPS AS MONOTHERAPY OR IN COMBINATION WITH EPINEPHRINE INJECTION IN THE SETTING OF ACTIVE BLEEDING.

- LATE REBLEEDING (≥30 DAYS FOLLOWING INITIAL ENDOSCOPIC HEMOSTASIS) OCCURRED IN 24%. OF THE THREE PATIENTS IN WHOM PRIMARY HEMOSTASIS WAS NOT ACHIEVED, TWO REQUIRED EMERGENCY HEMICOLECTOMY AND ONE PATIENT RECEIVED ANGIOGRAPHIC EMBOLIZATION.

- CASE SERIES INCLUDING A TOTAL OF 36 PATIENTS REPORT GOOD SAFETY AND EFFICACY OF ENDOSCOPIC BAND LIGATION FOR THE TREATMENT OF DIVERTICULAR BLEEDING WITH STIGMATA OF RECENT HEMORRHAGE

- THE BANDING TECHNIQUE DESCRIBED INCLUDES IDENTIFICATION OF THE CULPRIT DIVERTICULUM, MARKING OF THE SITE WITH A CLIP OR INDIA INK, FOLLOWED BY WITHDRAWAL OF THE COLONOSCOPE.
- A BAND LIGATION DEVICE IS THEN LOADED ONTO A GASTROSCOPE (IF THE BLEEDING LESION IS LOCATED IN THE LEFT COLON) OR A PEDIATRIC COLONOSCOPE



- ONCE THE LESION IS RE-IDENTIFIED, IT IS SUCTIONED INTO THE BANDING DEVICE, AND THE BAND IS DEPLOYED AS IS DONE IN THE TREATMENT OF VARICEAL HEMORRHAGE.

- RECENTLY, SHIBATA *ET AL*. (83) REPORTED ON 27 CASES OF DEFINITIVE COLONIC DIVERTICULAR HEMORRHAGE EFFECTIVELY TREATED (HEMOSTASIS ACHIEVED IN 96.3%) USING BAND LIGATION IN COMBINATION WITH A DISPOSABLE, TRANSPARENT SOFT HOOD ATTACHED TO THE TIP OF THE COLONOSCOPE.

- THE HOOD ALLOWS IMPROVED VISUALIZATION OF DIVERTICULA AND EXPOSURE OF HIGH-RISK STIGMATA.
- CAUTION, HOWEVER, SHOULD BE EXERCISED WHEN CONTEMPLATING USING BAND LIGATION FOR A RIGHT SIDE COLONIC DIVERTICULAR BLEED.

- *EX VIVO* COLON SPECIMEN DATA HAVE DEMONSTRATED SEROSAL ENTRAPMENT AND INCLUSION OF THE MUSCULARIS PROPIA POST BAND LIGATION IN THE RIGHT COLON.

- THE LEFT COLON, LIKELY DUE TO ITS THICKER MUCOSAL WALL, HAD LIMITED SUBMUCOSAL INVOLVEMENT AND ONLY A SINGLE SITE OF MUSCULARIS PROPRIA INVOLVEMENT

- THE USE OF DOPPLER ULTRASOUND PROBE MONITORING HAS BEEN REPORTED AS AN ADJUNCT TO ENDOSCOPIC TREATMENT. IN A STUDY OF 46 PATIENTS WITH DIVERTICULAR BLEEDING, 24 WERE FOUND TO HAVE MAJOR STIGMATA OF HEMORRHAGE AT THE TIME OF COLONOSCOPY

- DOPPLER ULTRASOUND PROBE NOTED ARTERIAL FLOW IN 92% (AND NO FLOW IN THOSE WITHOUT MAJOR STIGMATA). AFTER TREATMENT, NO PATIENT HAD RESIDUAL BLOOD FLOW AND NO PATIENT EXPERIENCED REBLEEDING AT 30 DAYS.

- THEREFORE, DOPPLER ULTRASOUND PROBE GUIDANCE HOLDS PROMISE FOR IMPROVING THE EFFECTIVENESS OF ENDOSCOPIC HEMOSTASIS IN DIVERTICULAR BLEEDING, BUT FURTHER DATA ARE NEEDED.

- AFTER ENDOSCOPIC TREATMENT, AN INDIA INK TATTOO OR CLIP (IF NOT ALREADY USED FOR HEMOSTASIS) SHOULD BE PLACED ADJACENT TO THE CULPRIT LESION TO ASSIST IN RE-LOCALIZATION SHOULD REBLEEDING OCCUR

ANGIOECTASIA.

ANGIOECTASIAS ARE COMMON IN THE RIGHT COLON AND IN THE ELDERLY. COLONIC ANGIOECTASIAS, INCLUDING RADIATION PROCTOPATHY, USUALLY PRESENT WITH OCCULT BLEEDING BUT CAN PRESENT WITH OVERT HEMATOCHEZIA, ESPECIALLY IN PATIENTS USING ANTICOAGULANT/ANTIPLATELET THERAPY

- **ENDOSCOPIC HEMOSTASIS THERAPY IS INDICATED IF THERE IS EVIDENCE OF ACUTE OR CHRONIC BLOOD LOSS. CONTACT AND NONCONTACT THERMAL ENDOSCOPIC THERAPIES ARE EFFECTIVE FOR TREATMENT OF ANGIODYPLASIA.**

- **NONCONTACT THERMAL THERAPY (ARGON PLASMA COAGULATION) IS MORE COMMONLY USED BECAUSE IT IS EASY TO USE, SAFE, EFFICIENT, AND HAS BEEN SHOWN TO IMPROVE HEMOGLOBIN LEVELS AND REDUCE THE FREQUENCY OF BLOOD TRANSFUSIONS**

- TYPICAL ARGON PLASMA COAGULATION POWER SETTINGS FOR THE TREATMENT OF COLONIC ANGIOECTASIA ARE 20–60 W (LOWER POWER USED IN THE RIGHT COLON) WITH AN ARGON GAS FLOW RATE 1–2.5 L/MIN

- LESIONS ARE OBLITERATED USING FOCAL PULSES OF 0.5–2-S DURATION. LARGER ANGIOECTASIA (>10 MM) AND THOSE LOCATED IN THE RIGHT COLON MAY BE LIFTED USING SUBMUCOSAL SALINE INJECTION BEFORE COAGULATION

POST-POLYPECTOMY BLEEDING

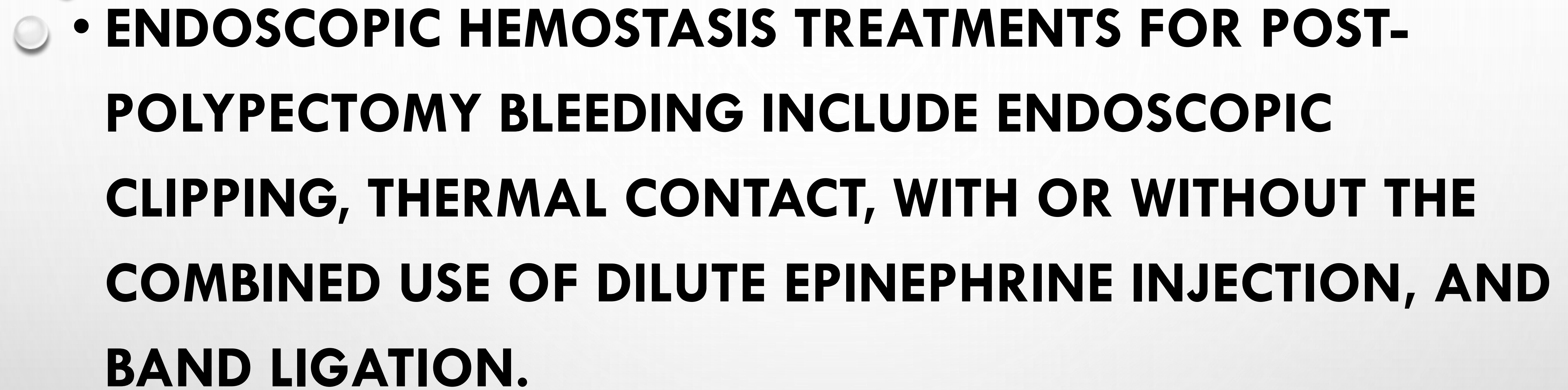
- **POST-POLYPECTOMY BLEEDING CAN OCCUR IMMEDIATELY OR DAYS TO WEEKS FOLLOWING POLYP REMOVAL.**
- **RISK FACTORS FOR POST-POLYPECTOMY BLEEDING INCLUDE**

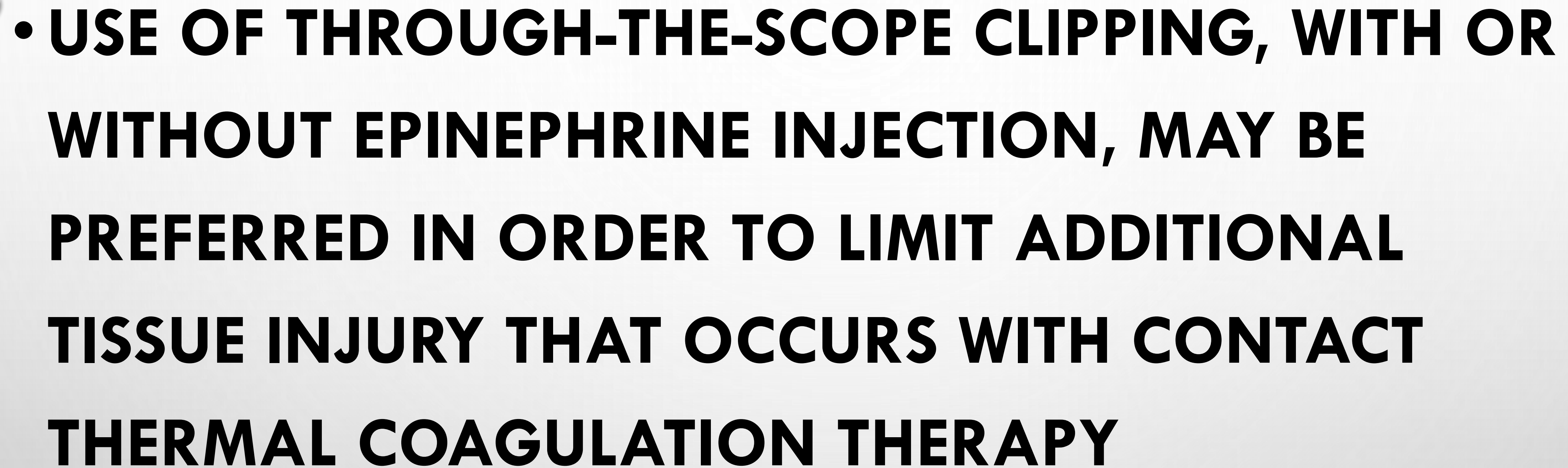
  LARGE POLYP SIZE (>2 CM),

  THICK STALK,

  RIGHT COLON LOCATION,

  AND RESUMPTION OF ANTITHROMBOTIC THERAPY.


• ENDOSCOPIC HEMOSTASIS TREATMENTS FOR POST-POLYPECTOMY BLEEDING INCLUDE ENDOSCOPIC CLIPPING, THERMAL CONTACT, WITH OR WITHOUT THE COMBINED USE OF DILUTE EPINEPHRINE INJECTION, AND BAND LIGATION.


• USE OF THROUGH-THE-SCOPE CLIPPING, WITH OR WITHOUT EPINEPHRINE INJECTION, MAY BE PREFERRED IN ORDER TO LIMIT ADDITIONAL TISSUE INJURY THAT OCCURS WITH CONTACT THERMAL COAGULATION THERAPY

- HEMOSTATIC TOPICAL POWDERS/SPRAYS HAVE RECENTLY BEEN REPORTED AS AN ENDOTHERAPY OPTIONS FOR ACUTE LGIB (93). THESE POWDERS/SPRAYS (HEMOSTATIC AGENT TC-325 (HEMOSPRAY, COOK MEDICAL, WINSTON-SALEM, NC), ENDOCLOT POLYSACCHARIDE HEMOSTATIC SYSTEM (ENDOCLOT PLUS INC., SANTA CLARA, CA), AND ANKAFERD BLOODSTOPPER (ANKAFERD ILAC KOZMETIK A.S., ISTANBUL, TURKEY)) ARE DELIVERED THROUGH THE WORKING CHANNEL OF THE ENDOSCOPE AND ARE INTENDED TO CONTROL “ACTIVELY” BLEEDING LESIONS.

- THERE ARE A LIMITED NUMBER OF CASE REPORTS AND SMALL CASE SERIES REPORTING ON THESE MODALITIES AS PRIMARY OR SALVAGE THERAPY IN POST-POLYPECTOMY BLEEDING, COLONIC ULCERATIONS INCLUDING SOLITARY RECTAL ULCER, RADIATION PROCTITIS, COLORECTAL NEOPLASIA, AND PORTAL HYPERTENSIVE COLOPATHY

- IN ADDITION, AN OVER-THE-SCOPE CLIP (OTSC, OVESCO ENDOSCOPY, TUBINGEN, GERMANY), MADE FROM A NITINOL ALLOY, HAS BEEN APPLIED AS SALVAGE THERAPY IN POST-POLYPECTOMY BLEEDING. THIS CLIPPING DEVICE IS LOADED ONTO AN ENDOSCOPE AND DEPLOYED IN A SIMILAR MANNER AS A BAND-LIGATING DEVICE.

- ACUTE LGIB ETIOLOGIES SUCH AS ISCHEMIC COLITIS, COLITIS DUE TO INFLAMMATORY BOWEL DISEASE, AND COLORECTAL NEOPLASMS ARE GENERALLY NOT AMENABLE TO DURABLE ENDOSCOPIC HEMOSTASIS AND ARE TREATED WITH SUPPORTIVE MEDICAL AND/OR SURGICAL CARE OF THE UNDERLYING ETIOLOGY.

THANKS A LOT