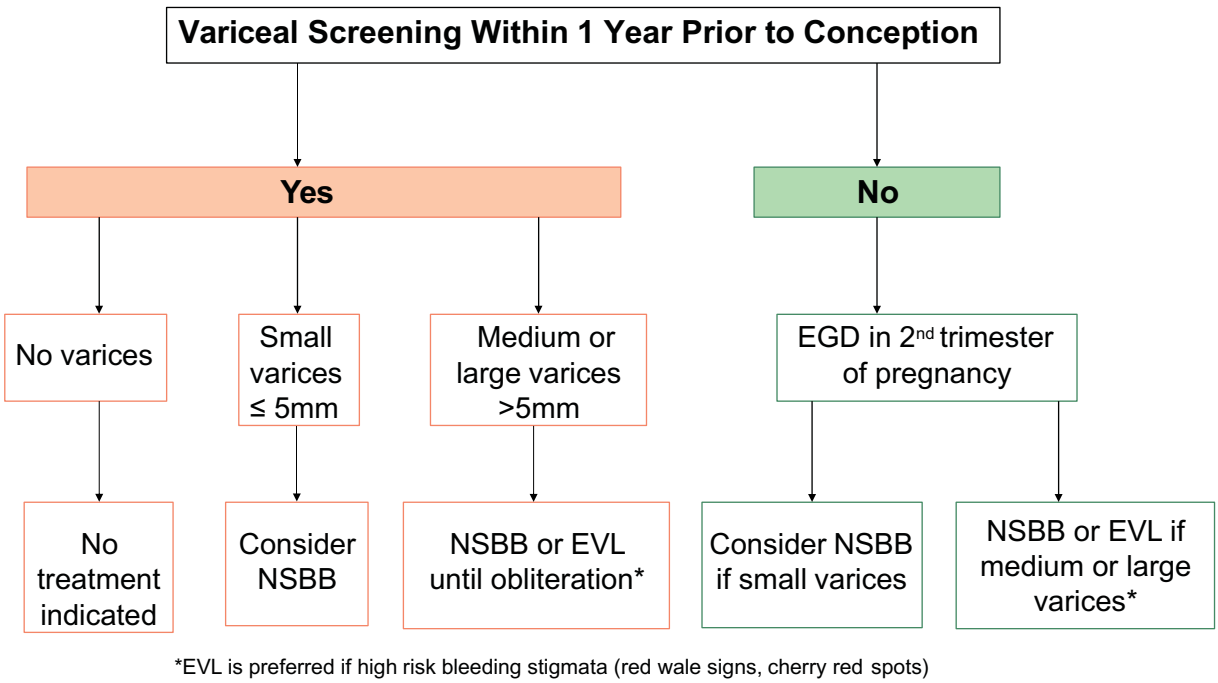

FIG. 5. Variceal surveillance in pregnancy. Endoscopic variceal screening within 12 months before conception is indicated for all women with cirrhosis. The circulatory changes normally occurring during pregnancy might increase variceal size and risk of bleeding. Risk is highest in the second trimester of pregnancy. EGD is recommended early in the second trimester of pregnancy if variceal screening was not done before conception, if there is ongoing liver injury, or in the setting of new symptoms of hepatic decompensation. Prophylactic therapy is advised if varices of any size are detected. NSBBs should be considered if small varices are identified. NSBBs or EVL are recommended for medium and large esophageal varices (do not flatten with insufflation), with EVL preferred if high-risk bleeding stigmata is present. If variceal screening algorithm is followed preconception, EGD is only indicated during pregnancy if there is ongoing liver injury or hepatic decompensation occurs. *EVL is preferred if high-risk bleeding stigmata (red wale signs, cherry red spots) are present.

Management of Gastroesophageal Variceal Bleeding

Management of GEV bleeding during pregnancy is extrapolated from nonpregnant patients. NSBBs may be used for primary or secondary variceal bleeding prophylaxis, with propranolol favored in pregnancy (Table 4). EVL is preferred for medium or large esophageal varices and should continue until obliteration of varices (Fig. 5). For active variceal hemorrhage, immediate resuscitation and stabilization of the mother and emergent endoscopic therapy are req uired.[114,201,327-329] Octreotide or somatostatin should also be initiated, but terlipressin should be avoided because it can cause uterine contractions and reduce uterine blood flow (Table 4). Although splanchnic vasoconstriction could reduce placental perfusion and increase risk of placental abruption,[330] comprehensive management of life-threatening variceal bleeding outweighs this theoretical risk. For antibiotic prophylaxis in acute variceal bleeding, cephalosporins are preferred due to favorable pregnancy and lactation safety data.[331]

Data on treatment of pregnant women with recurrent esophageal bleeding or bleeding from gastric varices are limited. Cyanoacrylate with or without coiling are options, depending on center expertise.[332-336] A transjugular intrahepatic portosystemic shunt has been used with success as rescue therapy for uncontrolled GEV bleeding and for decompression of abdominal wall varices before cesarean section when vaginal delivery was contraindicated.[334,335,337] Secondary prophylaxis for variceal bleeding includes use of NSBBs and EVL, with the combination preferred.[337]

Management of Lower GI Bleeding Due to PHT

Clinically significant PHT can manifest as hemorrhoids, anorectal varices, and portal hypertensive colopathy.[338] The prevalence of portal hypertensive colopathy is 23%, and rectal varices is as high as 56%,