## IUD COMPLICATIONS: UTERINE PERFORATION

### DEFINITION
Uterine perforation is a rare, but well recognized complication occurring with frequency of about 1/1000 of placements. All uterine perforation occurs or at least starts at the time of IUD placement, but fewer than 10% are noted at that time. Uterine perforation may occur during placement of an IUD with either the uterine sound or the IUD itself, but extrauterine location of the IUD is usually detected by imaging studies in patients who get pregnant using an IUD, those with pain and those whose IUD tailstrings shorten or are lost at a later date. Acute uterine perforation during placement rarely results in a medical emergency, but measures should be taken to determine that the patient is stable.

### SUBJECTIVE
May include complaints of:
1. During procedure:
   a. Sudden onset of intense pelvic pain.
   b. Cramping.
   c. Dizziness.
2. Post procedure:
   a. Missing IUD strings.
   b. Unexplained bleeding, cramping or pain.
   c. Pregnancy symptoms

### OBJECTIVE
May include:
1. During procedure:
   a. Excessive uterine depth (greater than expected from bimanual exam) on sounding or with introduction of IUD.
   b. Abrupt loss of uterine resistance during sounding or during IUD placement.
   c. Tachycardia, diaphoresis, hypotension, or syncope.
2. Post procedure:
   a. Imaging studies showing IUD outside endometrial cavity.
   b. Missing IUD strings.

### LABORATORY
May include:
1. Hemoglobin, if excessive bleeding reported
2. Pregnancy test if uterine instrumentation planned.

### ASSESSMENT
Possible uterine perforation.

### PLAN
1. If acute perforation:
   a. Attempt to gently retract and remove uterine sound or IUD (whichever is involved in suspected perforation).
      1) If excessive resistance is encountered with attempted removal or if complications encountered (bleeding, evidence of bowel involvement, etc.) STOP and:
         a) Provide supportive care.
         b) Consult MD and/or refer to ER immediately.
            (1) Arrange transportation appropriate to patient’s condition.
      2) If removal successful (instrument removed, no excessive bleeding, no evidence of bowel injury and patient’s symptoms resolved):
         a) Provide supportive care, observe closely and call MD.
         b) If MD advises further evaluation in an ER, arrange transportation appropriate to patient’s condition. Provide alternative contraceptive.
         c) If MD advises that patient may go home after prolonged evaluation on site with serial measurements of vital signs and hemoglobin:
            (1) Provide alternative method of birth control.
            (2) Advise strict pelvic rest for 48 hours.
            (3) Have patient RTC in 1-2 weeks. May consider another IUD placement attempt at that time.
2. If non-acute perforation noted in stable patient (IUD thought to be outside endometrial cavity),
### PLAN (Continued)

a. Perform UCG if indicated.
b. Provide another method of contraception.
c. Obtain ultrasound for localization/confirmation.
d. Refer for IUD surgical removal (See *IUD Complications: Missing Strings* protocol).

3. If embedment suspected by imaging studies, provide alternative contraceptive and refer for hysteroscopic removal.

### PATIENT EDUCATION

1. Reinforce importance of ER referral and/or follow-up care.
2. Counsel women about importance of using alternative method until evaluation and treatment complete.

### REFER to MD/ER

1. Patient with unresolved (MD) or complicated acute uterine perforation (ER).
2. Patient with non-acute perforation.
3. Patient with suspected embedment.

### REFERENCES