



Normal Menstrual Parameters

| Clinical dimensions of menstruation and menstrual cycle | Descriptive terms | Normal limits (5th to 95th percentiles) |
|---|-------------------|---|
| Frequencies of menses (days) | Absent | |
| | Infrequent | >38 |
| | Normal | 24 to 38 |
| | Frequent | <24 |
| Regularity of menses (variation defined as shortest to longest cycle length, in days) | Regular | Variation \leq to 9 days* |
| | Irregular | Variation > to 9 days* |
| Duration of flow (days) | Normal | \leq 8 days |
| | Prolonged | >8 days |
| Volume of monthly blood loss (objective) | Heavy | >80 |
| | Normal | 5 to 80 |
| | Light | <5 |
| Volume of monthly blood loss (objective) | Heavy | Clinical definition is subjective and defined as a volume that does not interfere with a woman's physical, social, emotional, and/or quality of life. |
| | Normal | |
| | Light | |

| Term | Defined as: |
|-----------------------------------|---|
| Normal Menstruation | Frequency – 24 to 38 days. |
| | Regularity – Variation \leq 7 to 9 days. No more than seven to nine days difference between the shortest to longest cycles; cycle length is the number of days from the first day of one menstrual cycle to the first day of the next. For some young girls who have occasional or frequent long cycles, typically, but not always, the cycle length evolves spontaneously to fit norms. For others, such an evolution may not occur. |
| | Duration – \leq 8 days. Up to eight days; duration is the number of days of bleeding in a single menstrual period. There are no specific clinical entities that are associated with reduced duration below four days with the exception of amenorrhea. |
| | Volume – Clinical definition is subjective and defined as a volume that does not interfere with a woman's physical, social, emotional, and/or material quality of life [14,15]. Research definition is \leq 80 mL vaginal "blood" loss per cycle. |
| Abnormal Uterine Bleeding | AUB is the overarching term used to describe any symptomatic variation from normal menstruation (in terms of frequency, regularity, duration, or volume) and also includes intermenstrual bleeding This term covers the full range of symptoms of abnormal bleeding. |
| Acute Abnormal Uterine Bleeding | An episode of uterine bleeding in a woman of reproductive age, who is not pregnant, that is of sufficient quantity to require immediate intervention to prevent further blood loss. |
| Chronic Abnormal Uterine Bleeding | Bleeding from the uterine body (or corpus), that is abnormal in frequency, regularity, duration, and/or volume, and has been present for at least the majority of the past six months. |

*Normal variation depends on age; these data are calculated excluding short and long outliers.

Data from:

- Fraser IS, Critchley HO, Munro MG, Broder M. A process designed to lead to international agreement on terminologies and definitions used to describe abnormalities of menstrual bleeding. *Fertil Steril* 2007; 87:466.



Flow Chart to Aid Abnormal Uterine Bleeding Between Menarche and Menopause

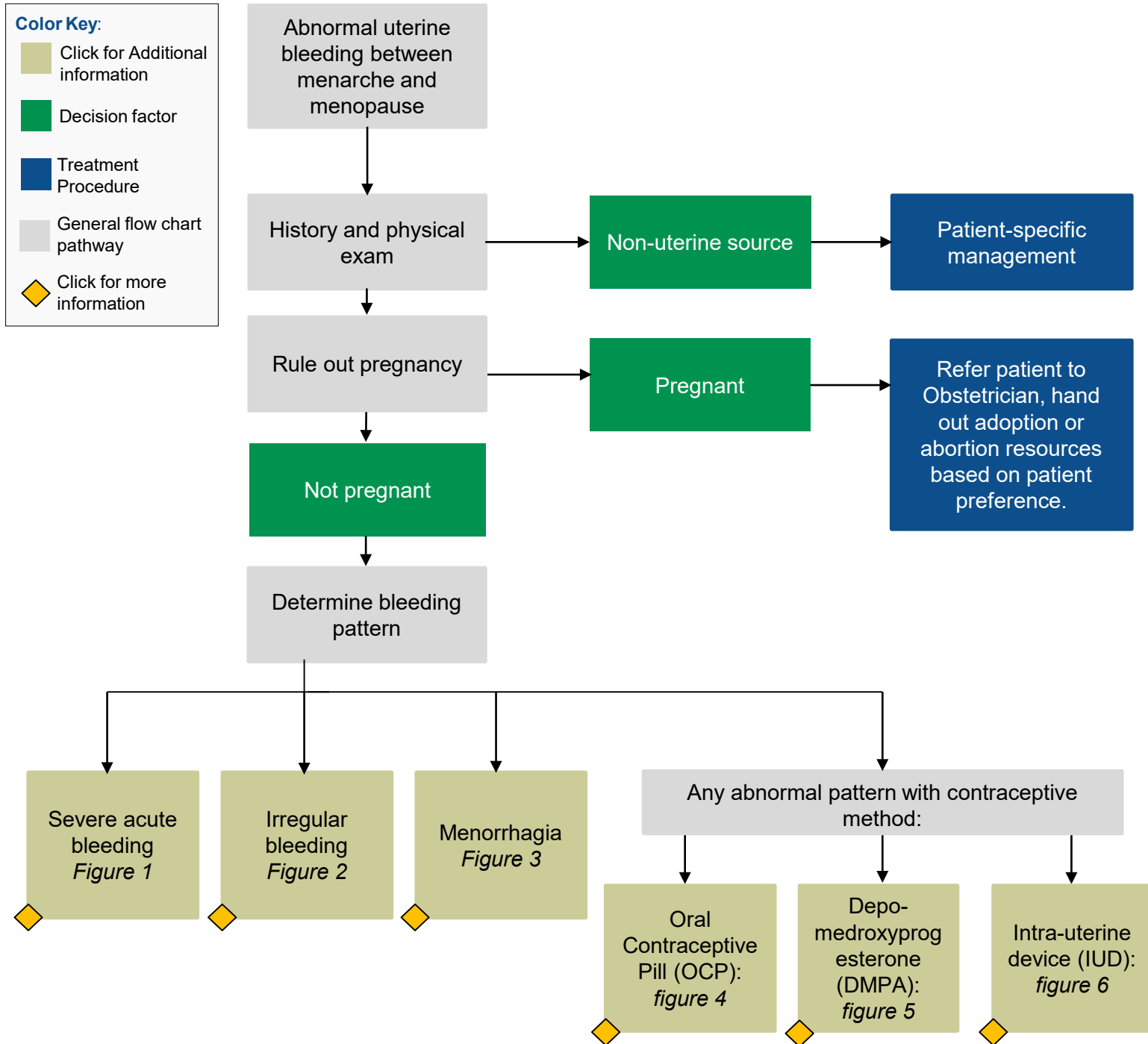




Figure 1: Severe Acute Bleeding in the Non-Pregnant Patient

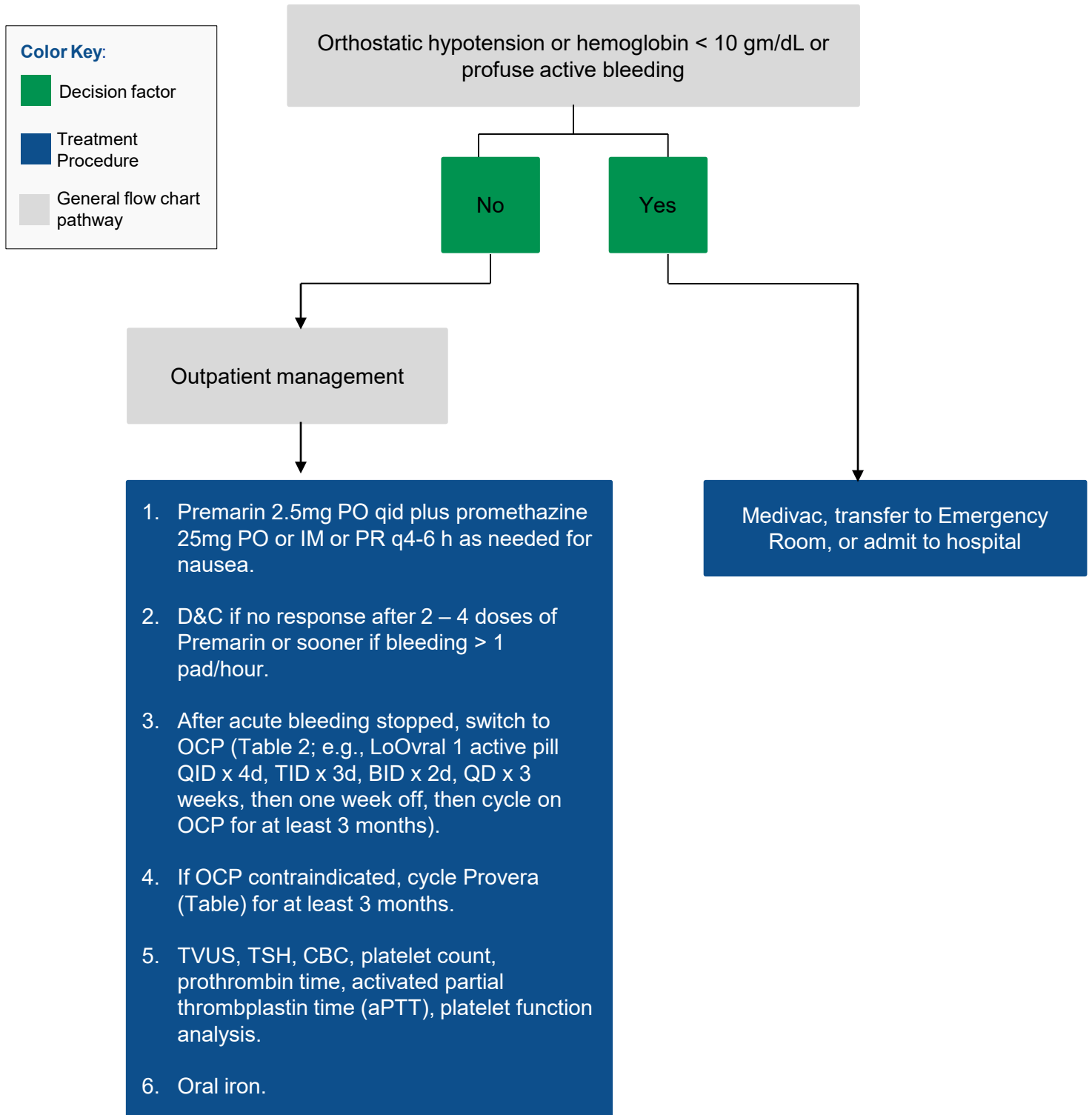




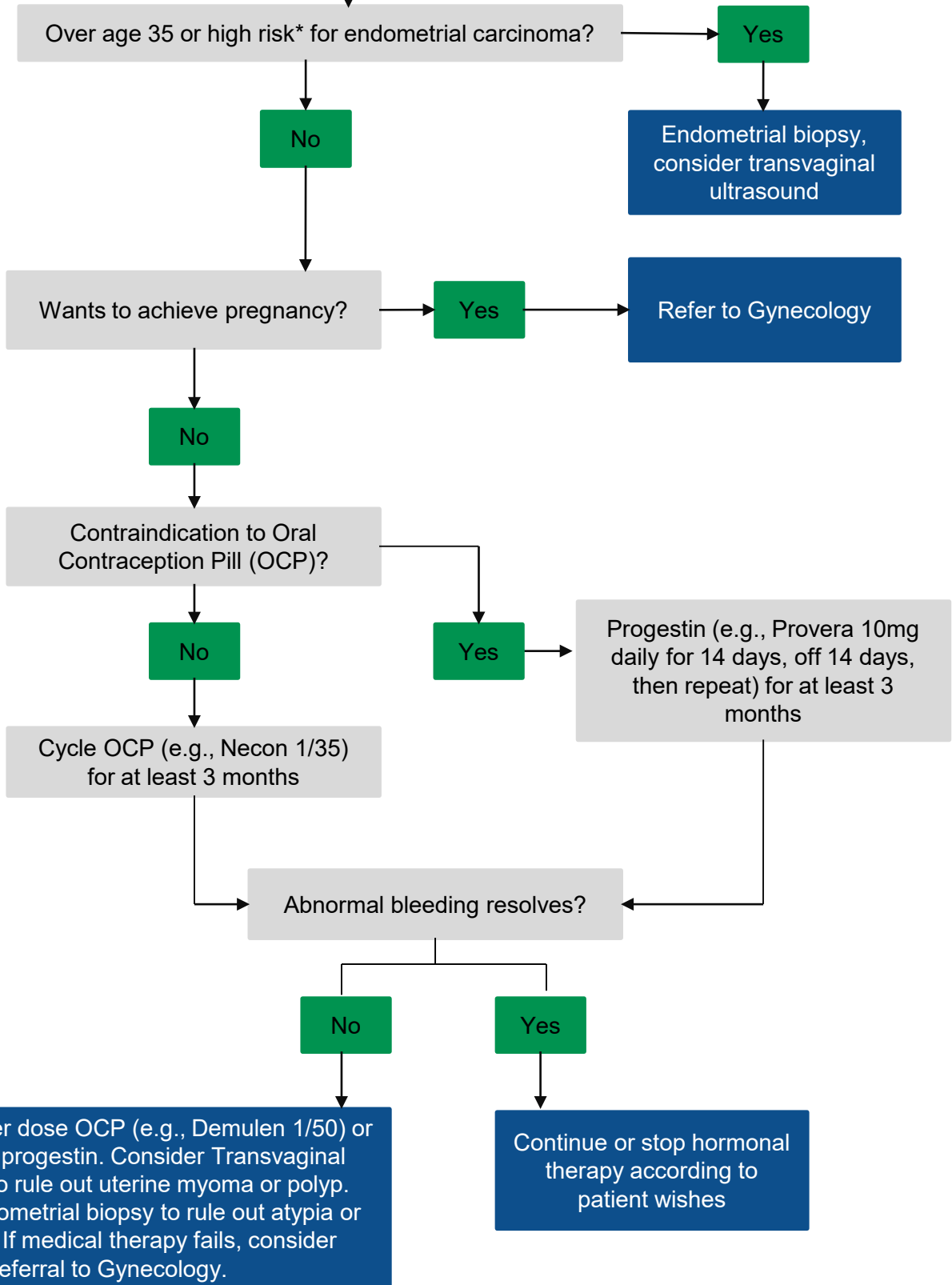
Figure 2: Irregular Bleeding in the Non-Pregnant Patient

- Test for sexually transmitted infection (STI)
- Obtain Thyroid Stimulating Hormone. Obtain Prolactin
- Obtain Pap smear especially in women with post-coital bleeding

Color Key:

- Decision factor
- Treatment Procedure
- General flow chart pathway

* "High risk" for endometrial carcinoma refers to prolonged unopposed estrogen (most commonly a patient with Polycystic Ovarian Syndrome (PCOS_ who has gone 2 or more years with few or no periods).



Consider higher dose OCP (e.g., Demulen 1/50) or higher dose progestin. Consider Transvaginal Ultrasound to rule out uterine myoma or polyp. Consider endometrial biopsy to rule out atypia or carcinoma. If medical therapy fails, consider referral to Gynecology.



Figure 3: Menorrhagia in the Non-Pregnant Patient

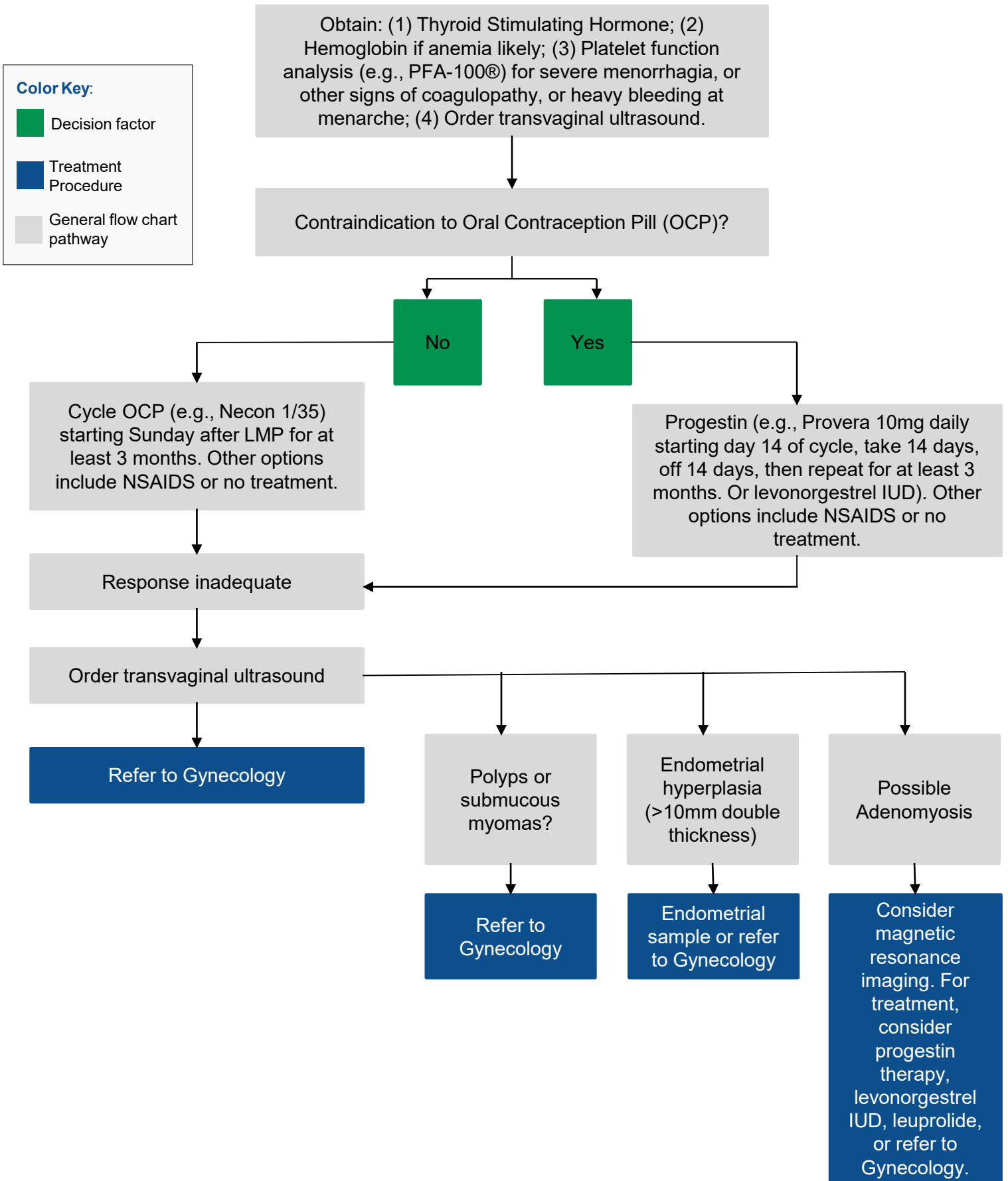




Figure 4: Oral Contraceptive Pill Associated Bleeding

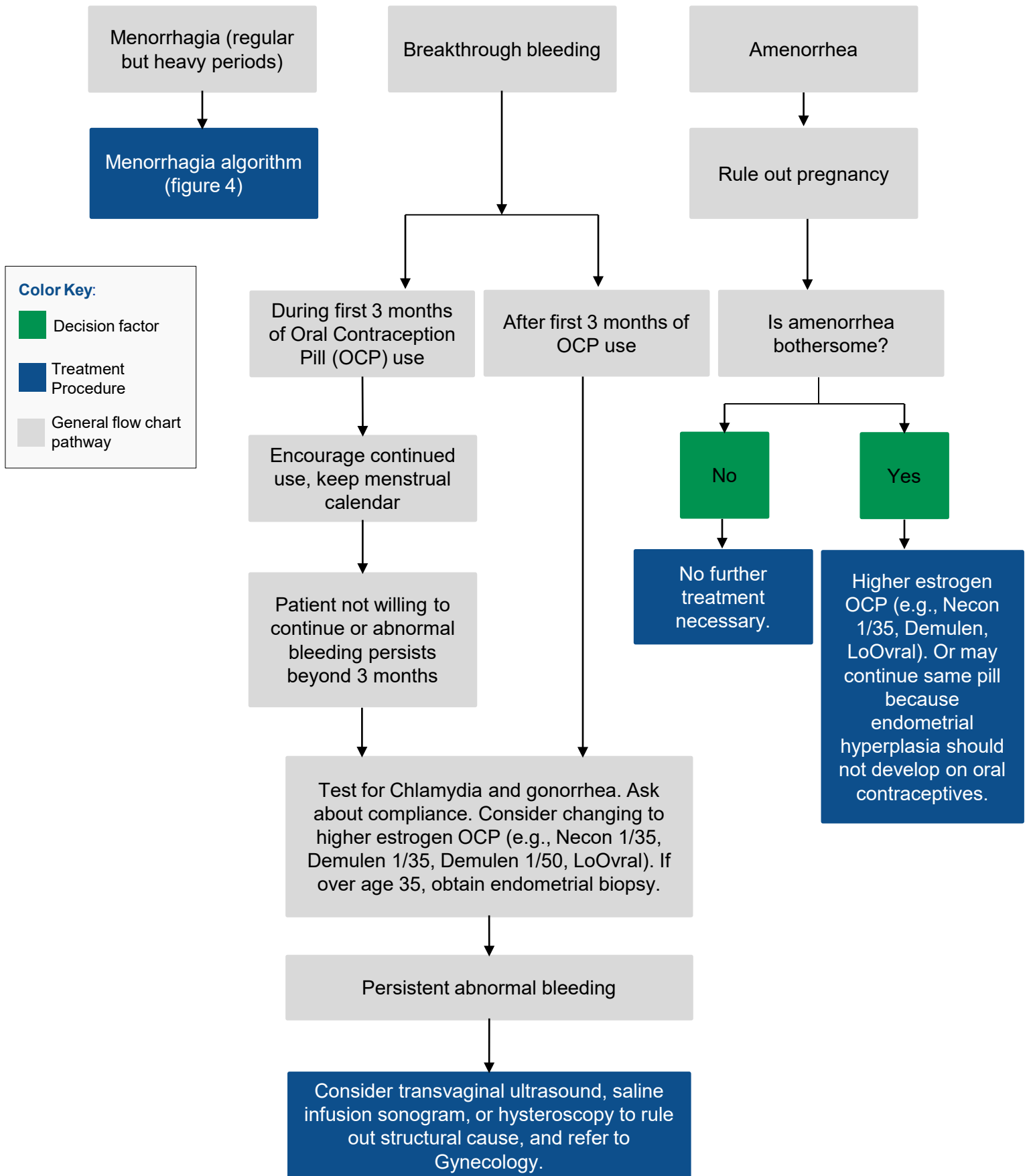




Figure 5: Depo-Medroxyprogesterone or Progesterone Only Pill-Associated Bleeding

Color Key:

- Decision factor
- Treatment Procedure
- General flow chart pathway

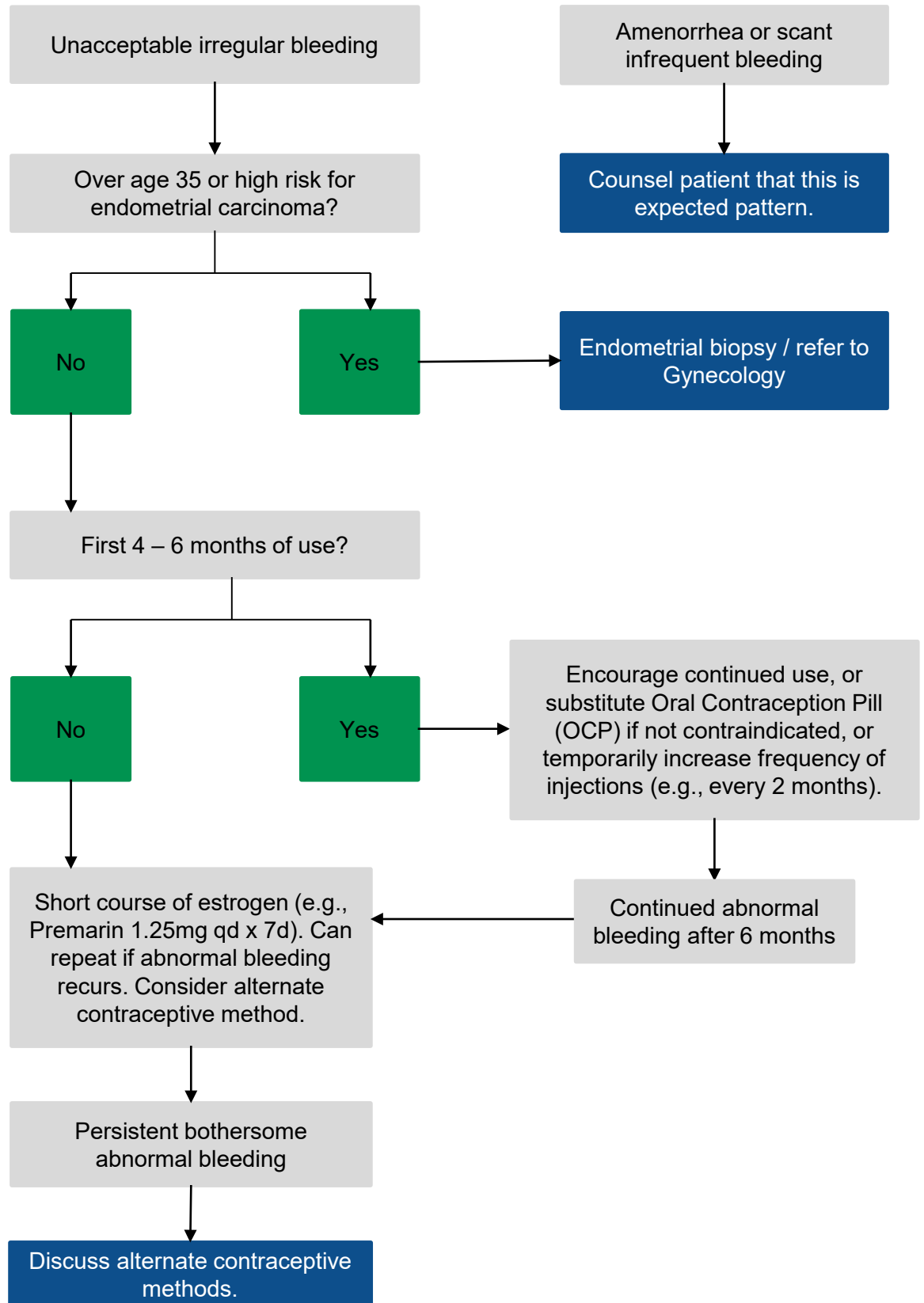


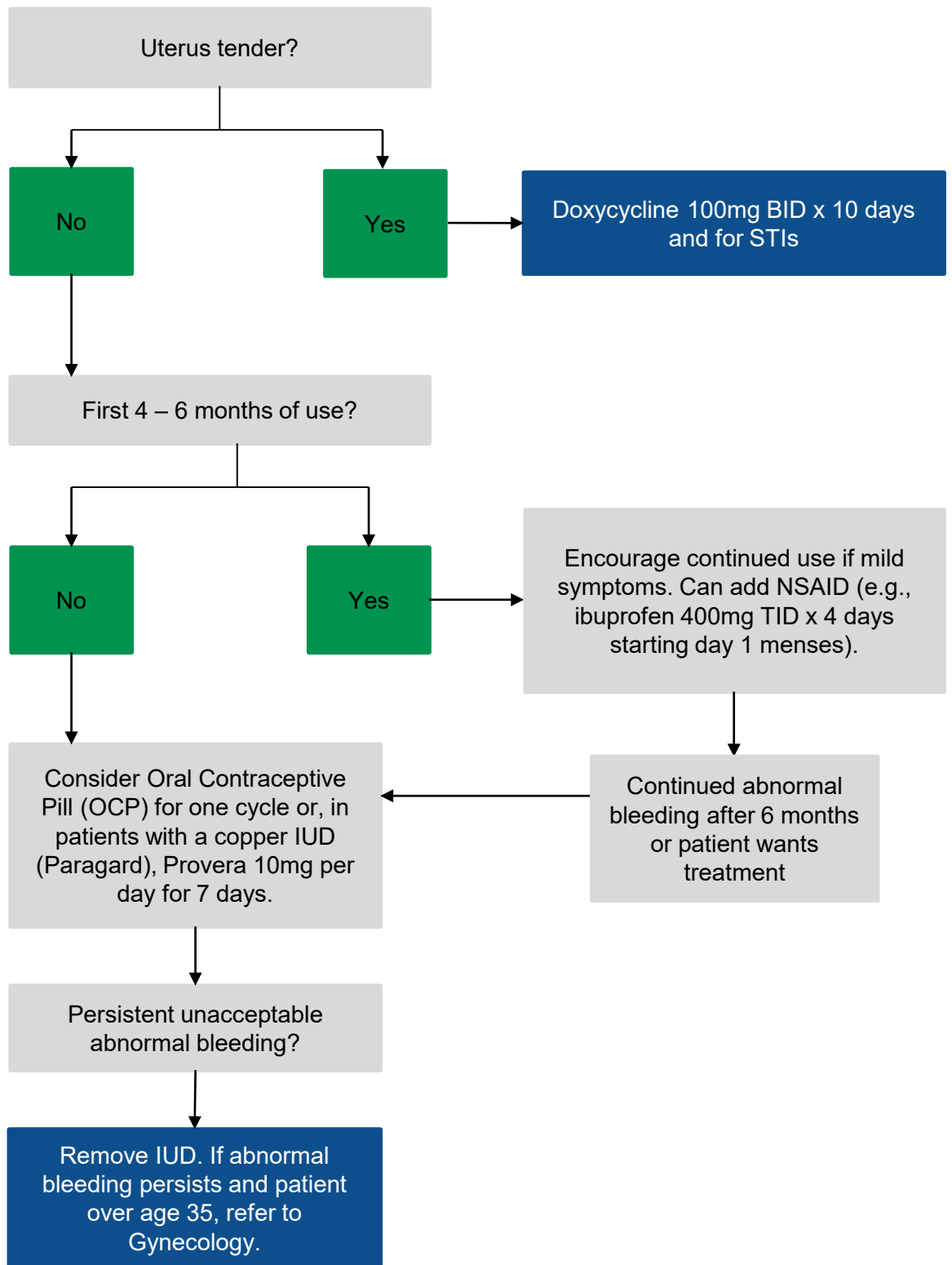


Figure 6: Intrauterine Device Associated Bleeding



Color Key:

- Decision factor
- Treatment Procedure
- General flow chart pathway





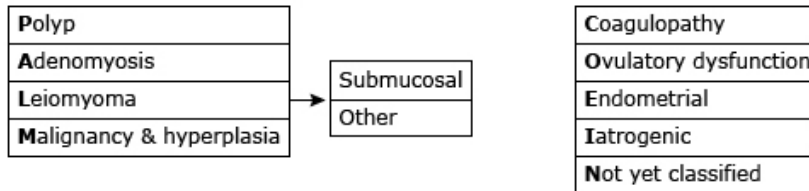
Uterine Bleeding Patterns



| Bleeding Pattern | Definition |
|---|---|
| Bleeding | Any bloody vaginal discharge that requires the use of such protection as pads or tampons |
| Spotting | Any bloody vaginal discharge that is not large enough to require sanitary protection |
| Bleeding/Spotting Episode | One or more consecutive days on which bleeding or spotting has been entered on the diary card |
| Bleeding/Spotting-Free Interval | One or more consecutive days on which no bleeding or spotting has been entered on the diary card |
| Bleeding/Spotting Segment | One bleeding/spotting episode and the immediately following bleeding/spotting-free interval |
| Reference interval | The number of consecutive days upon which the analysis is based (usually taken as 90 days for women using long-acting hormonal systems, and 28 or 30 days for women using once-a-month systems, including combined oral contraception) |
| Different types of analysis, which can be undertaken on bleeding patterns within a reference period | Number of bleeding/spotting days Number of bleeding/spotting episodes Mean, range of lengths of bleeding/spotting episodes (or medians and centiles for box-whisker plot analysis) Mean, range (medians and centiles) of lengths of bleeding/spotting-free intervals Number of spotting days and spotting-only episodes |



PALM-COEIN Classification System for Abnormal Uterine Bleeding in Nongravid Reproductive-Age Women



Basic classification system. The basic system comprises four categories that are defined by visually objective structural criteria (PALM: polyp, adenomyosis, leiomyoma, and malignancy and hyperplasia), four that are unrelated to structural anomalies (COEI: coagulopathy, ovulatory dysfunction, endometrial, iatrogenic), and one reserved for entities that are not yet classified (N). The leiomyoma category (L) is subdivided into patients with at least one submucosal myoma (LSM) and those with myomas that do not impact the endometrial cavity (LO).