Intrauterine contraception and menstrual bleeding

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Types of IUDs
- Inert IUDs consisting of plastic material developed in the 1950s-1960s, are not marketed anymore.
- Medicated IUDs: various Copper IUDs (medical devices) acting from 3 up to 5 (10-12 years).
- Levonorgestrel-intrauterine system (IUS) (medicinal products): Mirena (LNG-IUS-52mg for 5 years) and Jaydess (LNG-IUS-13,5mg for 3 years).

Bleeding pattern after IUD/IUS insertion:
- Copper-IUD: increase menstrual blood loss, which can be minimized by reducing the surface area of the foreign body. Bleeding irregularities independent of time after insertion.
- LNG-IUS: possible initial irregular bleedings. Reduction of menstrual blood loss and amenorrhea in many users (20% for the first IUS and for the 2nd LNG-IUS up to 70% in case of LNG-IUS-52mg; 10% in case of LNG-IUS-13,5mg).

Side effects:
- Perforation (rare but when most in the situation of insertion procedure)
- Dislocation or expulsion
- Abnormal bleeding: All causes of abnormal bleeding should be considered. Menstrual bleeding disorders and pain are the most common reasons for discontinuation of intrauterine contraception but the continuation rate of LNG-IUS is
about 80% and in comparison to the pill (about 60%) much higher.

IUD and IUS in pa-ti-ents with me-di-cal con-di-tions:
- Cop-per-IUD are re-com-men-ded by WHO in pa-ti-ents with existing risk fac-tors for hor-mo-nal con-tra-cep-ti-on.
- LNG-IUS:
  Heavy men-st-ral blee-ding: world-wide registered use for the Mirena-LNG-IUS
  End-o-met-ri-al pro-tec-tion du-ring est-ro-gen-re-pla-ce-ment in the me-no-pau-se ap-pears highly ef-fec-ti-ve; registered for the Mirena LNG-IUS in many countries

Future aspects:
Ear-ly en-do-me-trial ma-lig-nancy: in young wo-men to pre-ser-ve fer-ti-li-ty (?)
Adenomy-o-sis ute-ri in-ter-na: some cli-ni-cal tri-als showed pro-mi-se but further stu-died are nee-ded.

Pa-ti-ent in-for-ma-tion about spot-ting, light blee-ding, hea-vier or pro-lon-ged blee-ding are com-mon in the first 3 to 6 months of LNG-IUS use; risk of ame-nor-rhoea in LNG-IUS users; hea-vier or pro-lon-ged blee-ding and increased dys-men-or-rhoea are com-mon in case of Cu-IUD-use because of not-bac-te-ri-al in-flam-ma-tion from the free copper-ions.

Fu-ture de-ve-lop-ments of in-tra-ute-ri-ne con-tra-cep-ti-on will be out-li-ned.