

Extended use of Mirena for contraception

Family Planning Alliance Australia: Statement from the Clinical Reference Group of the Medical Advisory Committee July 2023

FPAA has adopted the recommendation of the Faculty of Sexual & Reproductive Healthcare (UK) that the use of Mirena, and any 52mg levonorgestrel intrauterine device (LNG-IUD), can be extended to up to 6 years for contraception. (1) This recommendation is off-label, as currently Mirena is licenced for 5 years in Australia.(2)

There is no change in the pre-existing recommendations for those who have a Mirena inserted at age 45 years or older, where extended off-label use for contraception is acceptable until menopause or age 55 years (i.e. up to 10 years). (1, 3)

Extended use is not recommended for:

- · those using Mirena for heavy menstrual bleeding or as part of menopausal hormone therapy.
- · Kyleena, the 19.5mg LNG-IUD.

Rationale for change

There are several versions of the 52mg LNG-IUD available internationally with a licensed duration of use longer than 5 years for contraception. Levosert and Benilexa, available in the United Kingdom, are licenced for 6 years. (4, 5) Mirena continues to be licensed for 5 years in the UK and Australia and is licensed for 8 years in the USA and Europe. (2, 6-8) The failure rate for the 52 mg LNG-IUD over 5 years is estimated to be less than 0.1 per 100 person years of use. (9) Several studies have shown a low contraceptive failure rate during the 6th and 7th year of use of the 52 mg LNG-IUD, Mirena. (10-13) A metanalysis of these studies including around 2000 users, demonstrated a similar pregnancy rate to studies of Mirena over 5 years of use. (14)

Evidence for contraceptive efficacy up to 8 years

Although evidence supports efficacy of Mirena in preventing pregnancy for up to 8 years of use, the studies are small, and this extra extension of use is not currently recommended in Australia.

A recent small single arm study of 233 Mirena users who completed 8 years of use found an overall failure rate of 0.28 per 100 person years for years 6-8 of use with no pregnancies during the 8th year of use. (15) Although this rate is slightly higher than the pregnancy rate for Mirena over 5 years, this data supported a successful application for extended use of Mirena for up to 8 years for contraception in the USA. (7) A study of 343 women who completed 8 years of use of a 52mg LNG-IUD, Liletta (not available in Australia), showed no pregnancies during the 6th and 8th year of use, with 2 pregnancies occurring in the 7 the year of use, giving an overall pregnancy rate similar to the 8 year extended use studies of Mirena. (16) Extended use is further supported by a pharmacokinetic study that showed the release of levonorgestrel at the end of 8 years use of Mirena is similar to the release of levonorgestrel in the 19.5 mg LNG-IUD at 5 years. (17)

Updated advice about replacing hormonal IUDs		
Switching from	Switching to	Considerations
Mirena in situ < 6 years Kyleena in situ < 5 years	New hormonal or copper IUD	Can be changed without additional contraceptive precautions. Ideally abstain or use condoms for 7 days prior to change in case new device cannot be inserted.
Mirena in situ 6-7 years		Can change if pregnancy test negative on day of re-placement. Ideally abstain or use condoms for 7 days prior to change in case new device cannot be inserted. Use condoms for 7 days if new hormonal IUD inserted and repeat pregnancy test after 1 month.
Mirena in situ > 7 years Kyleena in situ > 5 years		Exclude pregnancy as you would if no IUD in situ (i.e., a negative pregnancy test after at least 3 weeks of either no sex or using an additional contraceptive method). Follow usual contraceptive precautions as you would if starting a new IUD (i.e., use condoms for 7 days if a hormonal IUD is inserted).



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The Medical Advisory Committee of Family Planning Alliance Australia is comprised of senior medical educators, senior medical officers and medical directors of the member family planning organisations. The Clinical Reference Group of the Medical Advisory Committee exists as a means to review current clinical practice and provide evidence based recommendations for use by sexual and reproductive health practitioners where clinical guidance is lacking.

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