

Workshop Long-cycle Contraception in Adolescence

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Long-Cycle in Adolescence

- Extended Cycle - WHY
- Definition, Preparations
- Attitude of adolescents to contraception
- Which adolescents might profit from using the extended cycle ?
 - Are adherence and Pearl-Index improved ?
 - Are there medical advantages in adolescence ?
- Are there disadvantages / Safety? /What are the concerns today?

Extended-cycle - Why ?

| | 15-19 | 25-34 | 45-49 | 52-57 |
|--|-----------|-----------|-----------|-----------|
| 1 monthly | 26 | 35 | 26 | 12 |
| never | 41 | 37 | 46 | 66 |
| Less problems | 71 | 70 | 57 | 49 |
| Would you like to use hormonal contraception over a longer period of time to avoid menstruation? | 8 | 8 | 7 | |
| Would you like to use sometime hormonal contraception to suppress menstruation? | 54 | 32 | 35 | |

Long-Cycle in Adolescence

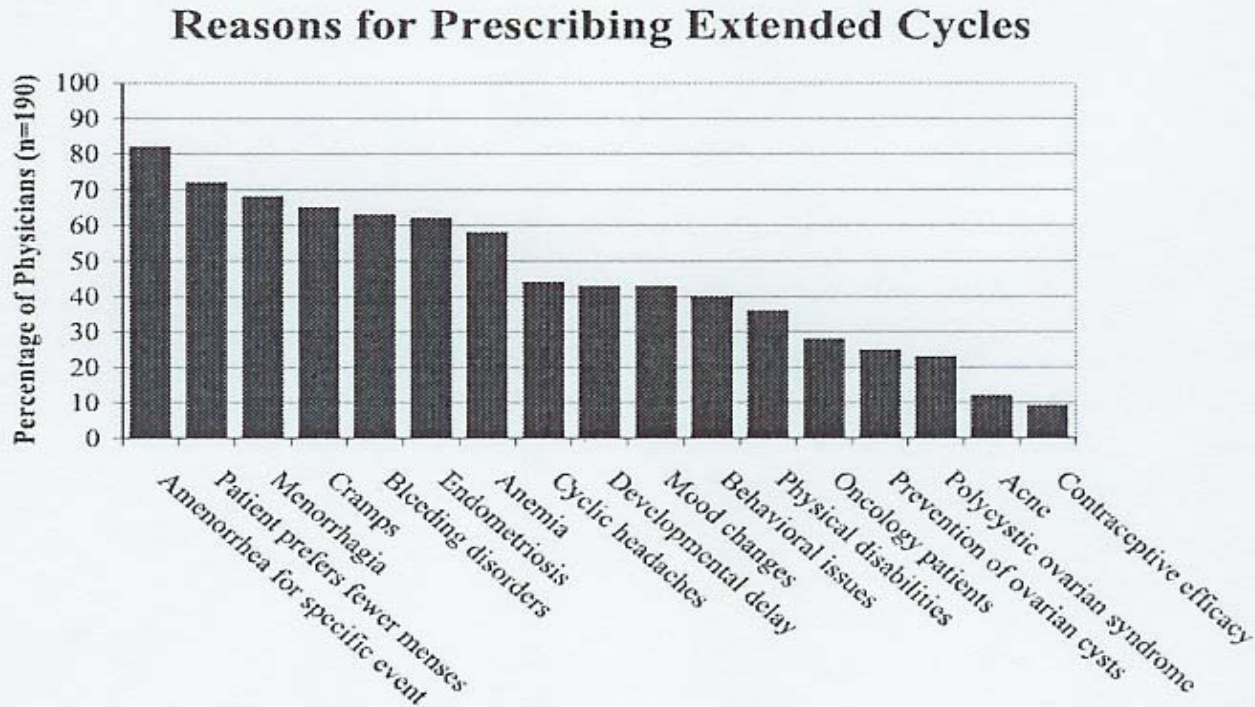


Figure 1. Reasons for prescribing extended cycles.

Definition , Preparations

Prospektive randomised Studies

| Author | Pill Preparation | Number of women, duration of study | Duration of extended cycle |
|---|------------------------|------------------------------------|------------------------------|
| Cachrimanidou 1993 | 30 EE/ 150 Desogestrel | N=284 12 Zyklen | 63 Tage |
| Andersson 2003 | 30 EE/ 150LNG | N=682 13 Zyklen | 84 Tage |
| Miller 2001 | 30 EE/ 300 Norgestrel | N=90 12 Zyklen | 42 Tage |
| Miller 2003 | 20 EE/ 100 LNG | N=60 12 Zyklen | 336 Tage |
| Kwiecien 2003 | 20 EE/ 100 LNG | N=32 6 Zyklen | 168 Tage |
| Miller 2005 ACOG 5/2005 | Nuvaring | N=429 12 Zyklen 4 Gruppen | 42,84,357 Tage |
| Wiegratz 2004 * Observational study | 30 EE/ 2mg Dienogest | N=30 | 189 Tage* 50% no bleeding |
| Foidart et al. Prospective open uncontrolled study | 30 EE/ 3mg Drospirenon | N= 177 | 126 No bleeding ? |

Concerns of adolescents using hormonal contraception

Menstrual irregularity from hormonal contraception

A reproductive health concern in adolescent women

Concern and wishes:

Menstruation once a months

Contraception should be as natural as possible

Spotting, unscheduled bleeding, amenorrhoea causes fear from pregnancy , confusion and fear from later infertility.

N= 73 13-17 Jahre Interview

Clark et al.2006

The comments from the adolescent girls indicated that it was very important to the young women to have regular monthly menstrual cycles. Disruption of this cyclicity was not welcomed specially when it involved amenorrhoea.

Gold und Coupey 1998

College students: 74% stopped Contraception if unscheduled bleeding occurred, 65% stopped, when amenorrhoea occurred.

Acceptance of irregular Bleeding

| | 15-19 | 25-34 | 45-49 | 52-57 |
|--------------|-------|-------|-------|-------|
| 1 x monathly | 26 | 35 | 26 | 12 |
| never | 41 | 37 | 46 | 66 |
| Negative* | 96 | 96 | 94 | |

*Oddens et al. 1999

Possible benefits of the Long- cycle for adolescents

Pearl-Index and Compliance

Is the extended cycle more safe ?

Pearl – Index und Compliance

- **PI 0.55 (vs 1.45)** **30µg EE/150µg LNG 84 days vs.21 days**
Seasonal (noncompliant cycles were excluded)
- **PI 1.27** **30µg EE/150µg LNG 84 Tage + 7 Tage EE 10 µg**
Seasonique (noncompliant cycles included)
- **PI 1.6** **20µg EE/90µg LNG 12 months**
Lybrel (noncompliant cycles included)
- **Cochrane library 2006 no difference between 21 day and extended regimes**



Medical advantages

Possible Benefits of the extended-cycle

- **Dysmenorrhoea: *no evidence***
- **PMS: no evidence**
- **PMDD: *no evidence***
- **Endometriose: *no evidence***
- **Headache in the pillfree period
*contradictory results***

Disadvantages / Side effects/ Safety



Adverse events occurring in > 5% of all treated patients

| (%) | Seasonale | Mercilon | Mirelle |
|----------------|-----------|----------|---------|
| Sinusitis | 19.1 | 22 | 19 |
| Headache | 21.0!! | 31 | 30 |
| Dysmenorrhoea | 9.5 | 8 | 5 |
| Nausea | 6.4 | 7 | 8 |
| Abdominal pain | 5.3 | 11 | 10 |

***21 Day-Regime 28% n.s.**

Dr. G.S.Merki-Feld USZ

Anderson et al.:AJOG 2006; Eur J Contracept Reprod Health Care 1999

Discontinuation for adverse events

SEASONALE

17%

EVRA

11-13%

OC 30 μ g

4.5 – 10%

Audet et al. Jama 2001, Roumen Hum Reprod. 2001, Foidart 2000 Eur J Contr. and Repro health care, ; Andersson 2006 Am J Obstet Gynecol.

Adverse events

More discontinuation because of breakthrough bleeding and amenorrhoea. No further differences in side effects.

Possible Risks of the long-cycle in comparison to the 21 day pill cycle

| | |
|--------------------------|--------|
| • Cardiovascular risk | idem |
| • Thrombosis | idem ↓ |
| • Endometrial Cancer | idem ↓ |
| • Breast Cancer | (↑) |
| • Return of fertility | (↑) |
| Amenorrhoea – a problem? | |

There are no longterm studies on the safety of extended cycles. Therefore at the moment the extended cycle should be indicated only in special situations.

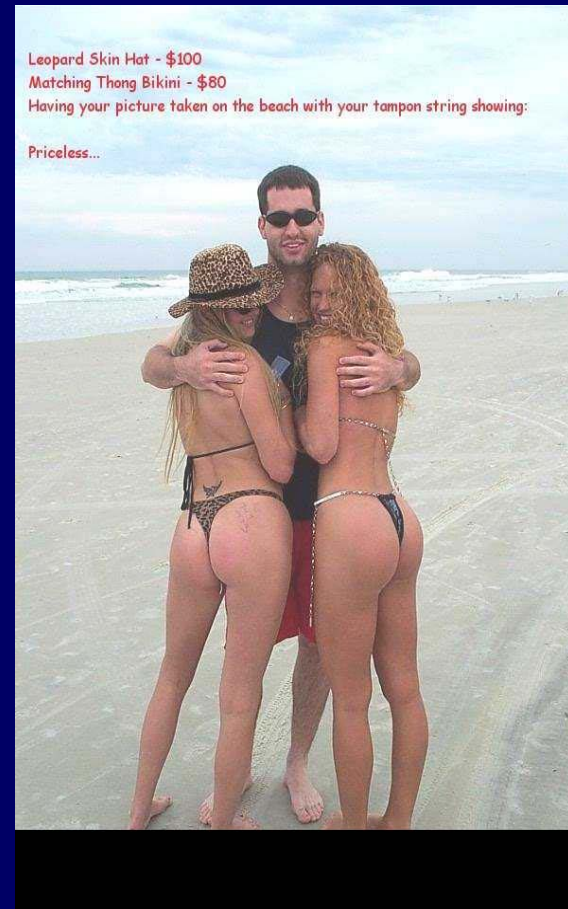
Tolerance

- Discontinuation depends very much on the duration of the long-cycle 40% vs. 28% in the 21-day regimen in healthy women without gynaecological problems. *
- 50-55% discontinuation in women with cyclic problems like headache, depression.**
- Nuvaring:

| | |
|----------|-----|
| 21 days | 23% |
| 42 days | 28% |
| 364 days | 41% |

Hormonal suppression of menstruation in adolescence – **Why not?**

- The acceptance of physical maturation is a sensible process during pubertal development. One part of this process is the adjustment to the *uncomfortable* menstrual bleeding.
- Advertising and peer groups put pressure on girls to use tampons and to be available for sport, swimming and other activities, although if they do not like to during monthly bleeding.
- *Is it in this context reasonable to exacerbate negative feelings and external pressure by prescribing bleedingfree long-cycle contraception??*



Conclusion

***Compare with other methods
and weigh carefully benefits
and risks***