RESEARCH HIGHLIGHT

Systematic review of new and old internal barrier method types now available online

Now available online, this systematic review explores the evidence on outcomes for users of earlier internal barrier methods of contraception, such as the multi-size Ortho All-Flex diaphragm, as compared to more recently marketed devices, the single-size Caya diaphragm and the FemCap cervical cap. Originally published in print in 2020, the review included four randomized controlled trials to evaluate differences in pregnancy, method discontinuation, and complications among users of the different method types. The abstract follows below and the full-text is available through BMJ Sexual & Reproductive Health.

Introduction: Our primary objective was to evaluate whether new types of single-size diaphragms or cervical caps differ in prevention of pregnancy compared with older types of diaphragms, and whether different types of gels differ in their ability to prevent pregnancy. A secondary aim was to evaluate method discontinuation and complications.

Methods: A comprehensive search was conducted in PubMed, Embase, and the Cochrane Library. The certainty of evidence was assessed according to the GRADE system.

Results: Four randomised controlled studies were included in the assessment. When comparing the new and old types of female barrier contraceptives the 6-month pregnancy rate varied between 11%-15% and 8%-12%, respectively. More women reported inability to insert or remove the FemCap device (1.1%) compared with the Ortho All-Flex diaphragm (0%) (p<0.0306). Urinary tract infections were lower when using the single-size Caya, a difference of -6.4% (95% CI -8.9 to -4.09) compared with the Ortho All-Flex diaphragm. The 6-month pregnancy rate for acid-buffering gel and spermicidal nonoxynol-9 gel varied between 10% and 12%. The discontinuation rate was lower in women who used acid-buffering gel compared with nonoxynol-9 gel (risk ratio (RR) 0.77, 95% CI 0.68 to 0.97).

Conclusions: Pregnancy rates were generally high in women using female barrier contraceptives. There was no difference in the efficacy for pregnancy prevention between the new types of diaphragms and cervical caps and the older diaphragms. The new types of diaphragms and cervical caps resulted in fewer urinary tract infections. Acid-buffering gels did not differ from spermicidal nonoxynol-9 gels regarding pregnancies but seemed to be better tolerated.
In June, Healthline.com published a roundup of the different types of barrier contraceptive methods entitled "Your guide to barrier methods of birth control."

In July, Glamour included cervical caps, diaphragms, and external condoms in the article "Six types of non-hormonal contraceptives you should have on your radar. Along with non-hormonal IUDs, spermicide, and contraceptive gels, author Juno DeMelo briefly describes each method and the pros and cons of each contraceptive."
Over the course of the last month, Insider.com has added multiple updates on different barrier contraceptive methods to their online Health Library. In late July, they published a feature on the diaphragm. In A diaphragm is a reusable, non-hormonal birth control option — here’s how it works, author Ashley Laderer outlines the basics of diaphragm use, from what the device looks like to how it is inserted and used during sex. In A cervical cap is a non-hormonal birth control method that you only use during sex — here’s how it works, writer Madeline Kennedy highlights the advantages and disadvantages of cervical caps, and compares their effectiveness to other hormonal and non-hormonal birth control methods.

A note on terminology
In order to acknowledge that people of many genders and lived experiences have a cervix and may use barrier methods of contraception, including non-binary people, men, women, and people with a range of other gender identities, we use gender-neutral terminology throughout this site except when referring to products and research that specifically use the term “woman” or “female”. In addition, to recognize both the terminology used widely in global contexts, as well as the name-change adopted in 2018 by the US Food and Drug Administration, we use the terms “internal condom” and “female condom” interchangeably.

CBAS is coordinated by Ibis Reproductive Health