

P022 Factors affecting natural antimicrobial release in the endometrium
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The human endometrium has been shown to express several natural antimicrobial molecules. Their importance is thought to be due to the fact that an infection could compromise fertility and/or the fetus itself, thus the presence of these innate immune molecules is vital to the maintenance of an infection free genital tract. Amongst the natural antimicrobials expressed within the endometrium are the β -defensins (HBD1-4), secretory leukocyte protease inhibitor (SLPI), lysozyme and elafin. These antimicrobials are differentially expressed and have previously been demonstrated to change during the menstrual cycle. They combine and provide full coverage throughout the menstrual cycle and their expression is governed by the levels of steroid hormones, inflammatory mediators and other as yet undiscovered agents. It has further been demonstrated that the expression of these antimicrobials is induced by the presence of infection. Expression of a number of these antimicrobials is rapidly 'switched on and off' over short periods of time indicating the involvement of one or more regulators. Several regulatory agents may be involved, including epithelial-stromal interaction within the endometrium.