**CERVIX**

This cycle is of normal/average length for her, about 33 days. Her cycle’s follicular phase (variable number of days preovulation) lasts until about day 20 or 21. Her fertile phase lasts from days 13 to 21 with ovulation on day 20. Her luteal (post-ovulation) phase is 13 days long (12-16 days is the norm and is not variable in a normal cycle).

Check out more information about the Fertility Awareness Method of birth control to learn more about cyclical temperature changes.

You may notice on the right side of some photos, some jagged looking skin, which is the remnants of her hymenal ring. Her os (opening in the cervix) is round because she has never given birth; the os becomes more of a slit after childbirth. On the sides of the photos, you can see her vaginal rugae, which are the ridges that make the elastic muscular canal of the vagina able to open/expand dramatically during arousal and childbirth.

She also tracked the depth/movement of her cervix in her vagina. These gradual shifts are not really distinguishable in the photos but was a tangible change as the depth she needed to reach a finger inside to touch her own cervix varied slightly each day. She also noted the firmness of the cervix and openness of the os — again a change she was feeling with her finger.

Her uterus is tipped backward (retroflexed or retroverted uterus), so you may notice that the cervix is pointing upwards in some photos. This is an anatomical variation that is present in about 20-30% of the population and is most often a genetic trait. It means that the body of the uterus lies more towards her back than over her bladder.

**VAGINA**

Vaginal cytology was evaluated weekly over 12 months in 20 adult female Cynomolgus monkeys (Macaca fascicularis). After sacrifice of the animals the histology of the ovaries, uterus and vagina were studied in different phases of the menstrual cycle. The cytological examination of the vaginal smears showed that the superficial cells increased in number towards the middle of the cycle and the number of intermediate cells declined gradually. Parabasal cells were observed mainly at the beginning of the cycle; they disappeared towards the middle of the menstrual cycle. During the early follicular phase, the cells were moderately separated from each other, and during the second half of the proliferative or follicular phase, the superficial cells appeared clumped together. Leucocytes were usually absent except for at the beginning of the cycle and in the last few days of the late secretory or luteal phase. The maturation index of the vaginal smears can be considered as a tool for distinguishing the different phases of the menstrual cycle. The microscopic examination of the genital organs showed that during the proliferative or follicular phase of the cycle, which corresponds to the development of the ovarian follicles, the uterus showed growth of endometrial glands, stroma and endothelial cell proliferation with capillary sprouts. Shortly after ovulation and parallel to the formation of the corpora lutea, the endometrium enters the secretory or luteal phase, which is characterized by coiling of endometrial glands, glandular secretion and the differentiation of the spiral artery. The most striking changes in the vagina, is the marked basal cell proliferation and thickening of the stratum granulosum during the follicular phase of the menstrual cycle. The histological changes observed in the vagina demonstrated a good correlation with the observation on cytological examination of the smears. The present study demonstrated that the process of angiogenesis in the uterus during the different phases of the menstrual cycle is a multiple phenomenon involving

1. **Menstrual cycle**

The menstrual cycle is the hormonal process a woman’s body goes through each month to prepare for a possible pregnancy. Regular menstrual periods in the years between puberty and menopause are usually a sign that your body is working normally. Irregular or heavy, painful periods are not normal. Many women also get premenstrual syndrome (PMS) symptoms. You can take steps at home and talk to your doctor or nurse about ways to treat your period problems and PMS.

Up to 80% of women report having some symptoms during the one to two weeks prior to menstruation. Common symptoms include acne, tender breasts, bloating, feeling tired, irritability and mood changes. These symptoms interfere with normal life and therefore qualify as premenstrual syndrome in 20 to 30% of women. In 3 to 8%, they are severe.

Stimulated by gradually increasing amounts of estrogen in the follicular phase, discharges of blood (menses) flow stop, and the lining of the uterus thickens. Follicles in the ovary begin developing under the influence of a complex interplay of hormones, and after several days one or occasionally two become dominant (non-dominant follicles shrink and die). Approximately mid-cycle, 24–36 hours after the luteinizing hormone (LH) surges, the dominant follicle releases an ovocyte, in an event called ovulation. After ovulation, the ovocyte only lives for 24 hours or less without fertilization while the remains of the dominant follicle in the ovary become a corpus luteum; this body has a primary function of producing large amounts of progesterone. Under the influence of progesterone, the uterine lining changes to prepare for potential implantation of an embryo to establish a pregnancy. If implantation does not occur within approximately two weeks, the corpus luteum will involute, causing a sharp drop in levels of both progesterone and estrogen. The hormone drop causes the uterus to shed its lining in a process termed menstruation. Menstruation also occurs in closely related primates (apes and monkeys).