

The term "involution" refers to the rapid reduction in the size of the uterus and its return to a state similar to its pre-pregnancy state, although it remains slightly larger than it was before the first pregnancy. The uterus weighs from 1000 grams immediately after birth to 500 grams at the end of the first week, reaching 300 grams by the end of the second week, and the involution process ends with a weight of 100 grams or less. After the placenta separates, the lining of the uterus is irregular and varies in thickness. The spongy layer of the lining is shed as lochia, while the basal layer remains in the uterus to develop into two layers within 48 to 72 hours after birth. The outer layer becomes necrotic and is lost in the lochia, while the layer closest to the myometrium contains endometrial glands that form the basis of the new lining. This process is completed in about 3 weeks, while the placental site may take up to 6 weeks to heal completely. Bleeding from the large blood vessels at the placental site is controlled by the pressure of the contracting uterine muscle fibres, and the clotted blood is gradually absorbed. The placental area heals by a process of desquamation rather than a fibrous scar, with endometrial tissue growing from the edges of the site and from the remaining endometrial glands. Desquamation is an important aspect of involution, as if a fibrous scar is left, it will limit the space available for new implantation and the number of possible pregnancies. With the significant decrease in oestrogen and progesterone levels after placental separation, uterine cells atrophy and the hyperplasia resulting from pregnancy begins to regress.