Effect of prolactin on isolated rabbit myometrium

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Reports in recent years that normal levels of human chorionic somato-mammotrophin (HCS) in cases of threatened abortion are associated with continuation of pregnancy (Genazzani, Aubert, Casoli, Fioretti & Felber, 1969; Singer, Desjardins & Friesen, 1970; Niven, Landon & Chard, 1972) have led to the suggestion that lactogenic hormones may play a role in the maintenance of pregnancy. Sheep prolactin at a concentration of 10 μ g/ml has been shown to exert a marked inhibitory effect on myometrial activity in pregnant guinea-pigs (Manku & Horrobin, 1973), rats primed with oestrogen and progesterone (Horrobin, Lipton, Muiruri, Manku, Bramley & Burstyn, 1973), as well as in non-pregnant human myometrium (Mugambi, Mati, Thairu & Muriuki, 1973). In the present study we show that sheep pituitary prolactin at a dose of 40 μ g/ml exerts a less inhibitory effect on pregnant rabbit myometrium than in the species quoted above.