Sixty-eight adult crossbred ewes were used to evaluate if exposure to rams at the onset of a progestagen treatment in late winter could improve ovulation synchronisation or fertility. Ewes isolated from males for 2 months, were allocated in control (C=32) and male effect (ME=34) groups. Oestrus was synchronized with FGA sponges (D0) and 500 IU of eCG at FGA removal (D12). From D1 to D5, 8 aproned rams were joined to ME ewes. All ewes were AI’ed with refrigerated semen 55 h after FGA removal. Plasma progesterone (P4) was assayed by RIA on days -14, -10, -7, -3, 0, 1, 4, 7, 12, 14 and 22. In 5 ewes of ME group, plasma LH was assayed (EIA) each 2 hours, from 26h before until 8h after ME. Cyclic (C=22; ME=27) and acyclic (C=10; ME=7) ewes until D0 were equally distributed between groups. LH levels before FGA were higher than after FGA (P<0.001). During FGA, no differences were found for LH before and after ME. P4 levels at AI were lower in ME than in C ewes (P<0.001). Ovulations detected by P4, resulted in synchronisation rates of 81.3% (C) and 97.1% (ME) (P<0.04). From these ewes 7/26 (26.9%) and 13/33 (39.4%) became pregnant at AI (P>0.05). Fertility on subsequent cycles by natural service was not different between groups (56.5%). Eight days after AI, P4 levels were not different between groups (3.5 ng/ml) in ewes pregnant by AI, but were higher in C (3.9 ng/ml) than ME (2.5 ng/ml) in those not pregnant (P<0.002). FGA succeeded in blocking LH surge induced by ME accounting for a higher rate of synchronised ovulations in ME ewes but not for a significant improvement on fertility.