Present study was conducted to determine the role of opioidergic and sympathetic nervous system in the processing of PCOS. 30 adult female rabbits were used. Control group (n=6) received sesame oil (0.25 ml) and treated group (n=24) was administered with testosterone injection (4 mg/kg) for induction of polycystic ovaries for four weeks. After four weeks treated group was subdivided into 4 groups: first group received naloxone (0.1 mg/kg) for inhibition of opioid system, second group received yohimbine (1 mg/kg) for inhibition of sympathetic nervous system, third group was injected with combination of naloxone and yohimbine for inhibition of opioid and sympathetic nervous system and fourth group remained intact for 5 weeks. Body weight was measured and endocrine parameters were determined by ELISA. Body weight, plasma LH, plasma estradiol and plasma insulin concentrations increased in PCO group as compared to control group (sesame oil treated). After naloxone treatment body weight, plasma LH concentration, plasma estradiol concentration and plasma insulin concentration were significantly decreased in PCO group. Yohimbine caused decrease in body weight, plasma LH concentration and plasma insulin concentration whereas it caused increase in plasma estradiol concentration of PCO group. Mixture of naloxone and yohimbine decreased body weight, plasma LH concentration and plasma insulin concentration in PCO group. Plasma estradiol concentration was increased in PCO group after combined treatment. It was concluded that naloxone and yohimbine are helpful in reducing PCOS by inhibiting opioid and sympathetic nervous system.