Gene hipogonadism hipogonadotrop:

▪ Kal1-in kallman xlinkat, cu anosmie

▪ FGFR1 - fibroblast growth factor receptor 1 - autozomal dominant, normonosmie.

▪ FGF 8 - minoritate de pc autozomal D

▪ cromatin helicase DNA binding protein 7 – kallman sau IHH

▪ prokineticina 2 si receptorul de prokineticina 2

▪ DAX 1- IHH cu ICSR