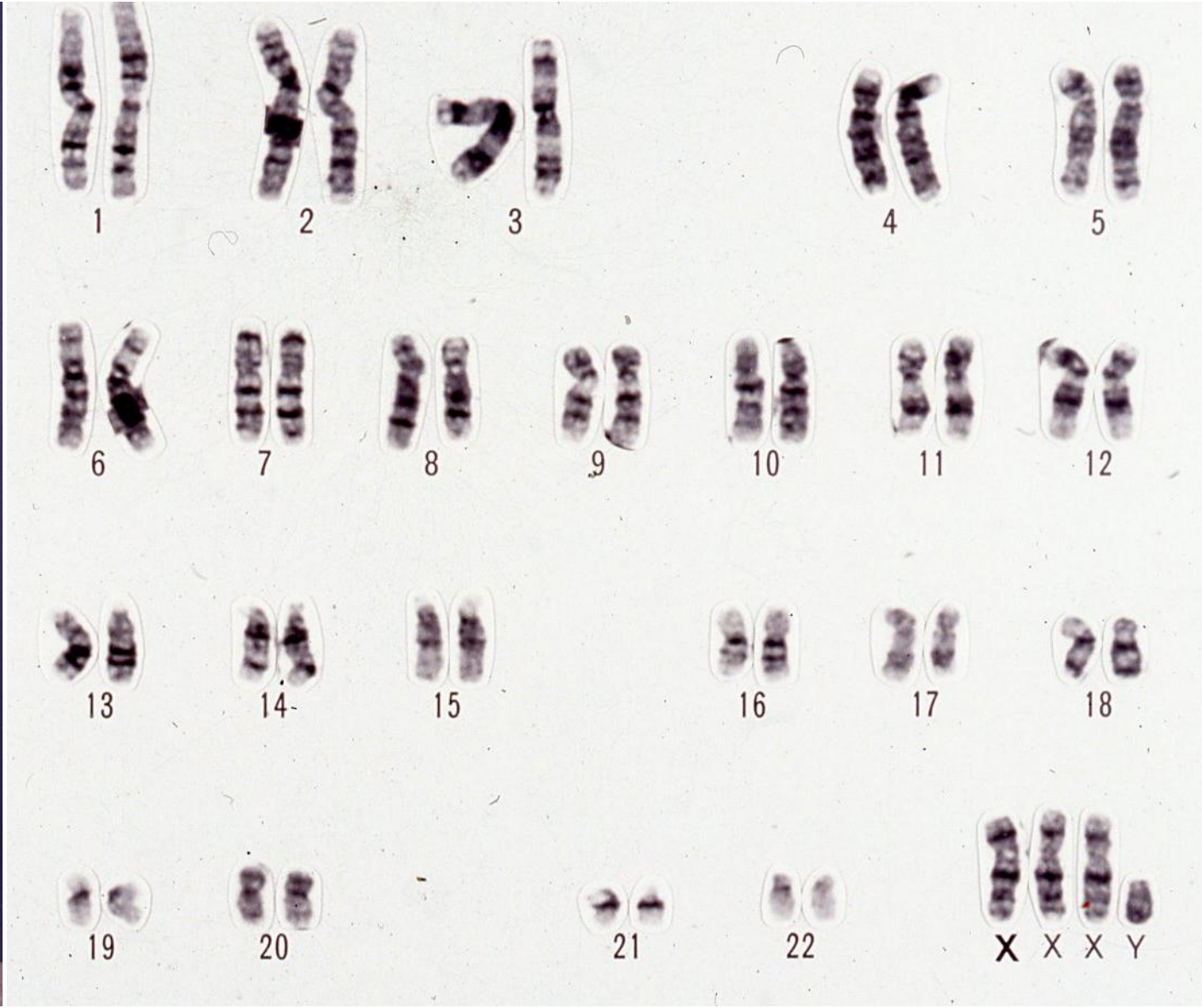


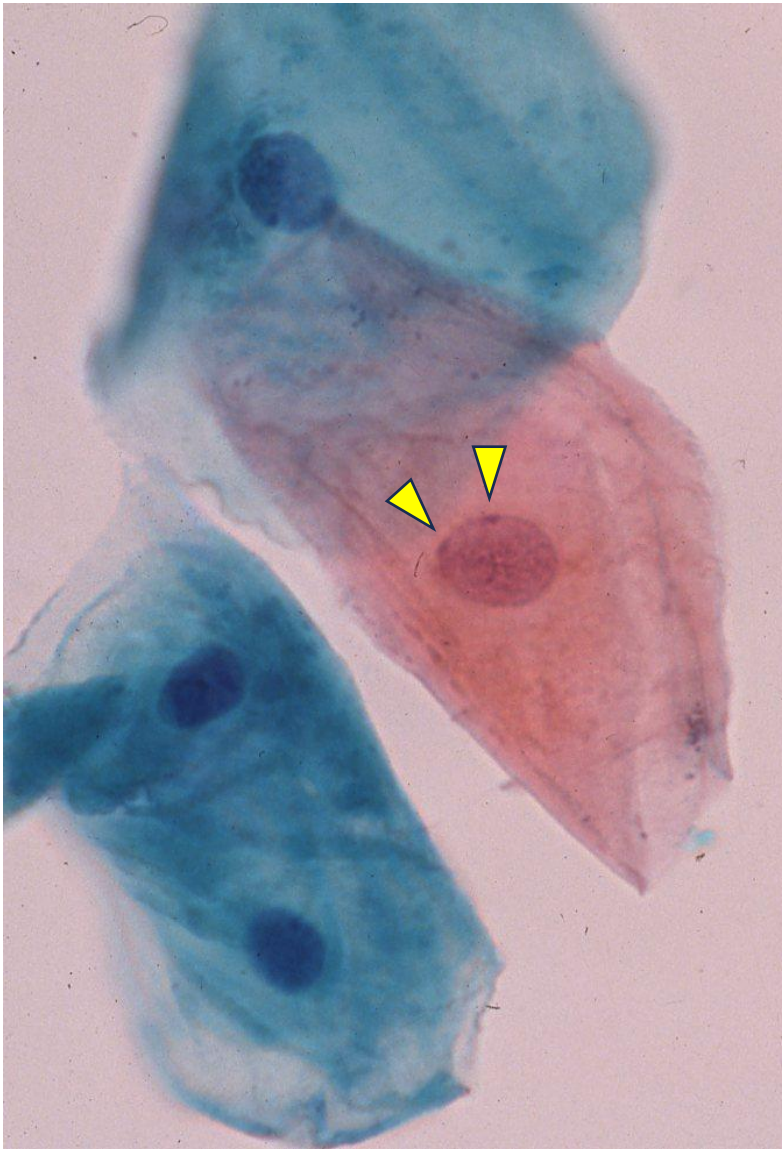
Barr bodies in Klinefelter syndrome (48XXY)

Barr body represents an inactive X chromosome located at the rim of the nucleus of neutrophils or other normal cells. Females typically have two X chromosomes, and one is rendered inactive in a process called lyonization. A genotypical female (46XX karyotype) has one Barr body per somatic cell nucleus, while a genotypical male (46XY) has none. The Barr body can be seen in the interphase nucleus as a darkly staining small mass in contact with the nuclear membrane. people with Klinefelter syndrome (47XXY) have a single Barr body, and people (super female) with a 47XXX karyotype have two Barr bodies. Here presented is a 21 y-o male case of Klinefelter syndrome with 48XXXY karyotype. Two Barr bodies are seen in the oral smear cytology stained with Papanicolaou stain.

Ref.: Wikipedia. 2025. Barr body. https://en.wikipedia.org/wiki/Barr_body



Karyotyping with G-banding analysis in a 21 y-o male patient with Klinefelter syndrome. The karyotype is 48XXX,Y.



Barr bodies

Two Barr bodies seen in scraping cytology from the oral mucosa of a 21 y-o male patient with Klinefelter syndrome (48XXX Y karyotype). As arrowheads and arrows indicate, two Barr bodies can be seen at the rim of the nucleus of the squamous epithelium of oral mucosa origin (Papanicolaou).