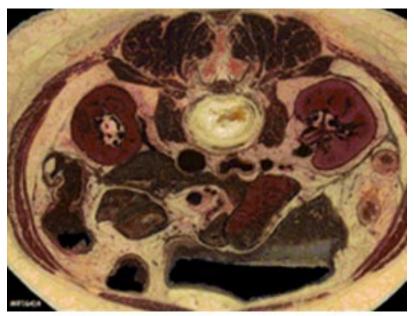


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## **Female-Specific Diseases**



Axial view of visible woman. (From the Visible Human Project, National Library of Medicine.)

Biomedical research has demonstrated biological differences between females and males in virtually every organ and system of the body. Research has also revealed the genetic and molecular basis of a number of gender-based differences in health and disease, some of which are related to genotype — XX in the female and XY in the male.

These findings suggest that there are multiple differences in the basic cellular biochemistry of males and females that can affect an individual's health. Many of these differences do not arise from differences in the hormonal regime to which males and females are exposed, but are a direct result of the genetic differences between the two sexes.

Further studies on the relative roles of the sex chromosome genes is likely to illuminate the reasons for expression of some diseases within and between the sexes. Understanding the bases of these gender-based differences is also important for the development of new approaches to disease prevention, diagnosis, and treatment.

## **Diseases**

Breast and ovarian cancer

Rett syndrome