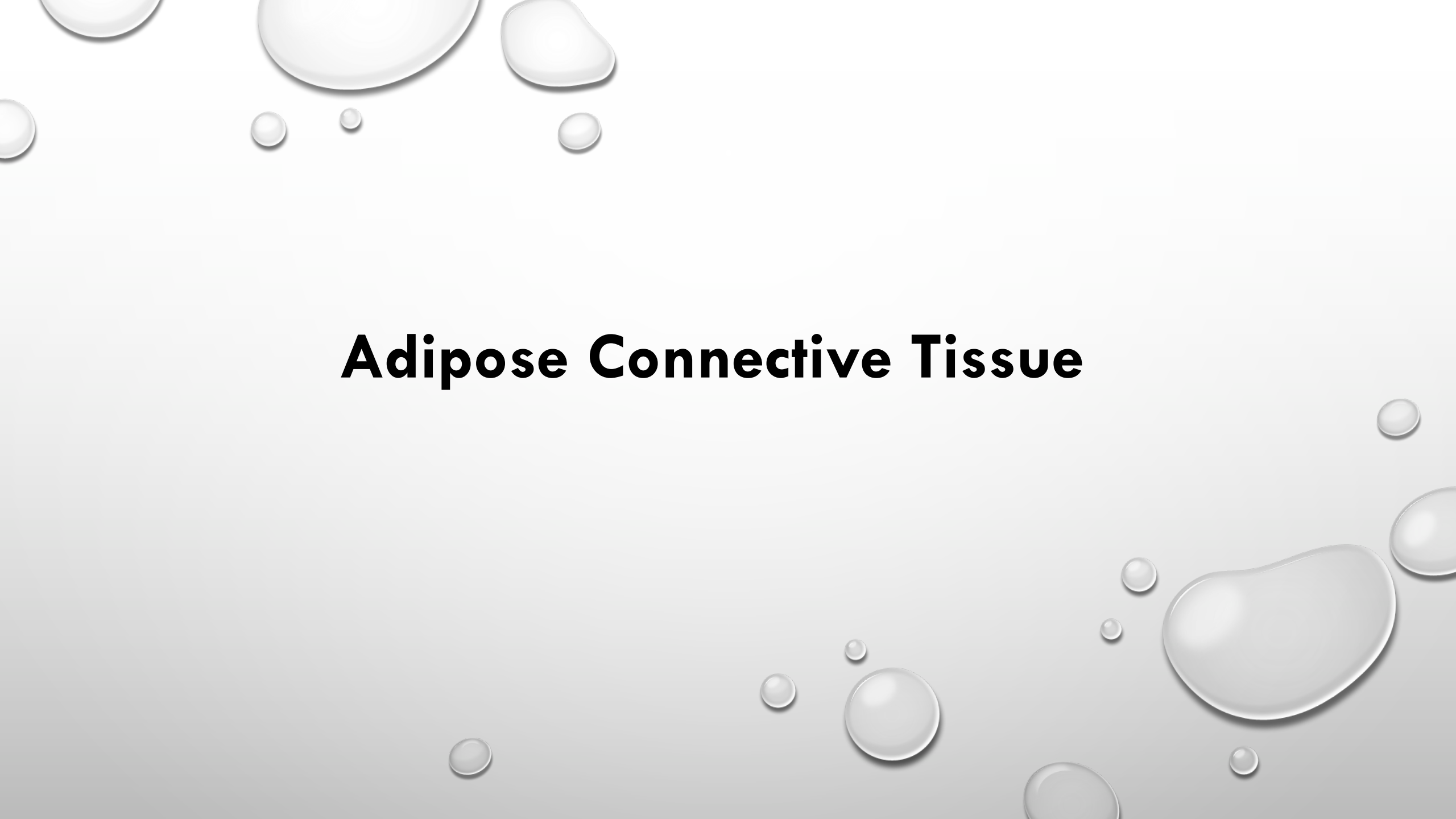


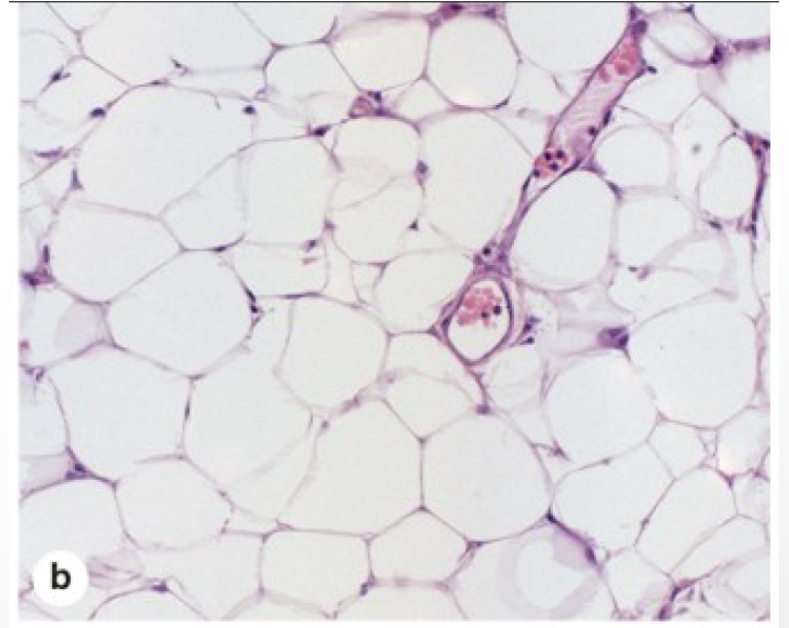
The background of the slide is a light gray gradient. It is decorated with numerous realistic water droplets of various sizes. Some droplets are large and prominent, while others are small and subtle. They are scattered across the slide, with a higher concentration in the top-left and bottom-right corners. Each droplet has a highlight and a shadow, giving it a three-dimensional appearance.

Adipose Connective Tissue

Adipose Tissue

- Large cells found isolated or in small groups within loose or dense irregular connective tissue.
- Occur in large aggregates in adipose tissue
- Connective tissue in which fat-storing cells or adipocytes predominate.
- Represents 15%-20% of the body weight in men, more in women.
- Storage depots for Neutral fats, chiefly triglycerides
- White and brown adipose tissues are different in color, location, function, and structure.

White Adipose Tissue



- More common.
- Cells each containing one large cytoplasmic droplet.
- Long-term energy storage
- When completely developed, a white adipocyte is very large, between 50 and 150 umm in diameter... unilocular
- Signet-ring appearance.
- Lipomas !
- The distribution of white adipose tissue changes significantly through childhood and adult life.
- Adipocytes develop from mesenchymal stem cells.

Brown Adipose Tissue

- Constitutes 2%-5% of the newborn body weight
- Located mainly in the back, neck, and shoulders.
- In adults it is found only in scattered areas: around the kidneys, adrenal glands, aorta, and mediastinum.
- Color of brown fat: very abundant mitochondria and the large number of blood capillaries.
- Brown adipocytes contain many small lipid inclusions....Multilocular
- Tissue's principal function of heat production and warming the blood (thermogenesis).
- Cells of brown fat are smaller than white adipocytes..... nucleus is more centrally located.

