

**Endocrine block**



# **Anatomy of Suprarenal glands**

**Done by:**

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# Anatomy of Suprarenal glands

- The two suprarenal glands are yellowish retroperitoneal organs that lie on the upper poles of the kidneys , just above the level of T12
- They are surrounded by renal fascia (**but** are separated from the kidneys by the perirenal fat).
- Each gland has an outer cortex and an inner medulla.

	The right gland		The left gland	
Characteristic features:	<ul style="list-style-type: none"> <li>• Is pyramid shaped and caps the upper pole of the right kidney.</li> </ul>		<ul style="list-style-type: none"> <li>• Crescentic in shape and extends along the <b>medial border</b> of the left kidney from the upper pole to the hilus.</li> </ul>	
Relations:	<u>Anterior relation:</u> <ul style="list-style-type: none"> <li>• Right lobe of the liver and inferior vena cava.</li> </ul>	<u>Posterior relation:</u> <ul style="list-style-type: none"> <li>• Diaphragm.</li> </ul>	<u>Anterior relation:</u> <ul style="list-style-type: none"> <li>• pancreas, lesser sac, and stomach</li> </ul>	<u>Posterior relation:</u> <ul style="list-style-type: none"> <li>• Diaphragm.</li> </ul>
Arteries supply:	<ul style="list-style-type: none"> <li>• Each gland receives branches from <b>three</b> main arteries: <ul style="list-style-type: none"> <li>➢ <u>Inferior phrenic</u></li> <li>➢ <u>Aorta</u></li> <li>➢ <u>Renal artery</u>.</li> </ul> </li> </ul>			
Veins Drainage:	<ul style="list-style-type: none"> <li>• A single vein emerges from the hilum of each gland and drains into the <b>Inferior vena cava</b> <u>on the right</u> &amp; <b>Renal vein</b> <u>on the left</u>.</li> </ul>			
Lymph Drainage:	<ul style="list-style-type: none"> <li>• The lymph drains into the <b>lateral aortic nodes</b>.</li> </ul>			
Nerve Supply:	<ul style="list-style-type: none"> <li>• <b>Preganglionic sympathetic fibers</b> derived from the splanchnic nerves. Most of the nerves end in the medulla of the gland.</li> <li>•</li> </ul>			
Function of the glands:	<ul style="list-style-type: none"> <li>• <b>The cortex</b> of the suprarenal glands secretes hormones that include: <ul style="list-style-type: none"> <li>• <u>Mineral corticoids</u>, which are concerned with the <u>control of fluid and electrolyte balance</u></li> <li>• <u>Glucocorticoids</u>, which are concerned with the <u>control of the metabolism of carbohydrates, fats, and proteins</u></li> </ul> </li> <li>• Small amounts of <u>sex hormones</u>, which probably <u>play a role in the prepubertal development of the sex organs</u>.</li> <li>• <b>The medulla</b> of the suprarenal glands secretes the <u>catecholamines: epinephrine and norepinephrine</u></li> <li>•</li> </ul>			