



MG21415 | KIDNEY STONE MODELS (NEPHROLITES)





Detailed representation of kidney stone pathology, showing different shapes and locations of stones within the kidney, including hydronephrosis. The model shows multiple anatomical structures of the urinary system affected by nephroliths, allowing for detailed study of the disease.

Applications:

- * Study of anatomy in schools and universities.
- * Medical and scientific training.
- * Study of the urinary tract.
- * General anatomical study.
- * Training for surgical dissection.
- * Patient education and procedure demonstration.

Features:

- * High didactic level.
- * Numbered and hand-painted.
- * Rich in detail.
- * High-fidelity natural molding.



- * Made of resistant synthetic material.
- * Precise replicas.
- * Hand-painted.
- * Includes information card with related structures.
- * Polymer base with support and metal rod.
- * Resin with approval in toxicological tests.

3D Technology and Augmented Reality:

Our anatomical models offer a visual complement through information cards that activate 3D models viewable in augmented reality (AR). This interactive platform aids learning, allowing for comparative analysis of anatomical structures and offering resources for continuing education in anatomy, physiology, and pathophysiology.

Technical Specifications:

- * Material: Synthetic resin.
- * Scale: Natural size.
- * Finish: Hand-painted and numbered.
- * Includes: Information card.
- * Base: Polymer with support and metal rod.

Main Structures:

Capsule: Fibrous membrane that surrounds the kidney, protecting it and maintaining its shape.

Renal column: Projections of renal tissue extending from the cortex to the medulla, dividing the renal lobes and containing blood vessels and collecting ducts.

Renal pyramid: Conical structures in the renal medulla where urine is formed and drained into the minor calyces.

Stone impacted in the renal pyramid: Stone obstructing urine flow within the renal pyramid, potentially causing pain and kidney damage.

Distended renal pyramid with stones: Renal pyramid increased in volume due to urine accumulation from the presence of stones obstructing flow.

Stone impacted in the major calyx: Stone obstructing urine flow in the major calyx,



potentially leading to hydronephrosis.

Renal calyx: Small cup-shaped structures that collect urine from the renal pyramids and conduct it to the renal pelvis.

Renal papilla: Pointed end of the renal pyramid that projects into a minor calyx, releasing urine.

Fat in the renal sinus: Adipose tissue that fills the space within the kidney, protecting the internal structures.

Hydronephrosis: Dilation of the kidney due to obstruction of urine flow, usually caused by stones, tumors, or other obstructions in the urinary tract. Other structures can be verified directly on the physical piece or on the interactive 3D model.

About the Anatomical Models:

Developed with resin replication technology, offering an alternative for teaching and research. They present the essential morphological characteristics with excellent cost-benefit, good resistance, hand painting and numbering for precise identification of structures.

Acquire our anatomical model and provide an enhanced learning experience at your institution. Contact us to

List of all visible structures:

- Capsule
- Renal column
- Renal pyramid
- Impacted stone in renal pyramid
- Renal pyramid distended with stones
- Stone impacted in major calyx
- Renal calyx
- Renal papilla
- Renal sinus fat
- Renal sinus fat
- Hydronephrosis
- Stone impacted in renal pelvis
- Ureteropelvic junction
- Stone impacted in the beginning of the urethra



- Ureter
- Nephrons
- Distended renal pelvis
- Stone impacted in minor calyx
- Renal cortex