**AUGOYE OMESIRI**

**ANATOMY**

**18/MHS01/094**

**Intestinal rotation**

Intestinal rotation is also called intestinal malrotationIntestinal malrotation, also called twisted intestines, occurs when the [intestine](https://www.chp.edu/our-services/transplant/intestine/education/intestine-disease-states) does not twist correctly. Instead, the way in which it twists blocks the intestine. Sometimes, abnormal tissue referred to as Ladd's bands attaches the cecum to the duodenum (beginning of the small intestine) and may create a blockage in the duodenum.

Our intestines are formed while we are fetuses in the womb, during the tenth week of gestation. As the intestines develop, they normally move from the base of the umbilical cord back into the abdominal cavity. As the intestine returns to the abdomen, it makes two rotations and settles into its normal position.

When rotation is incomplete and the intestine does not become fixed into that position, this creates intestinal malrotation.

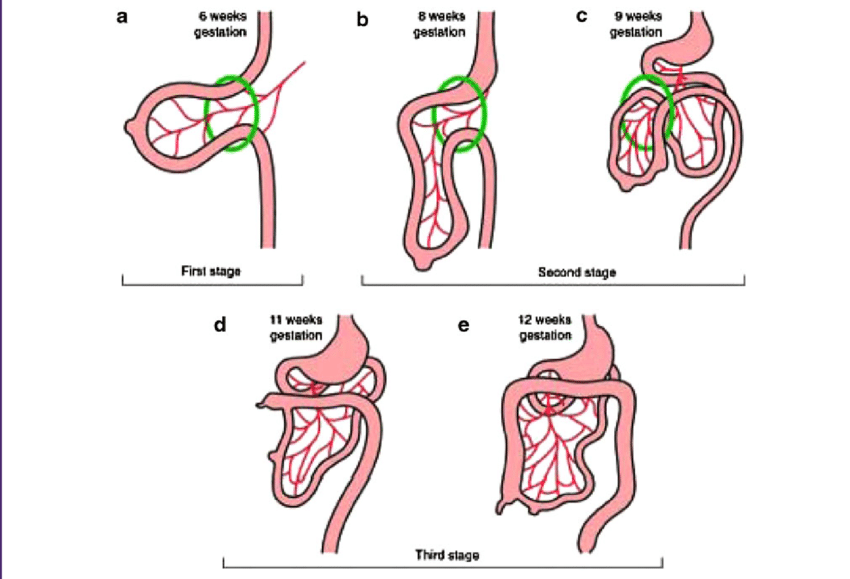
The malrotated intestine is prone to twisting in on its own blood supply, blocking the flow. This is called intestinal volvulus. When intestinal volvulus involves the entire small bowel, it is referred to as mid-gut volvulu

Intestinal malrotation is usually not evident until the intestine becomes obstructed by Ladd's bands or twisted. When the intestine is obstructed by Ladd's bands or when the blood supply is twisted, symptoms may include:

* Vomiting bile (greenish-yellow digestive fluid)
* Drawing up the legs
* Pain in the abdomen (belly)
* Abdominal distention (swelling)
* Rapid heart rate
* Rapid breathing
* Bloody stools
* Malnutrition
* Slowed growth

To confirm a diagnosis of intestinal malrotation, patients have various blood tests and diagnostic imaging studies done. These tests include:

* **Abdominal X-ray** – Reveals any intestinal obstruction.
* [**Barium swallow upper GI test**](https://www.chp.edu/our-services/transplant/intestine/education/intestine-transplant-tests/barium-swallow) – Examines the small intestine for abnormalities and to check the position of the jejunum. A chalky fluid called barium is swallowed or placed into the stomach through a small nasogastric tube. The barium coats the inside of the stomach and intestine so that they will show up on X-rays.
* [**Barium enema**](https://www.chp.edu/our-services/transplant/intestine/education/intestine-transplant-tests/barium-enema) – Examines the large intestine, and uses the same radiographic contrast agent as mentioned above. Barium is given into the rectum as an enema. X-rays can show that the large intestine is not in normal position.
* [**Abdominal ultrasound**](https://www.chp.edu/our-services/transplant/intestine/education/intestine-transplant-tests/diagnostic-ultrasound-abdomen) – Produces moving images of internal organs using invisible electromagnetic energy. Ultrasounds can help doctors evaluate the function of the intestine and monitor the blood flow

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