

# VOMITING

→ UPPER GI TRACT RIDS ITSELF OF ITS CONTENTS

## REASON:-

- EXCESSIVE IRRITATION
  - OVERDISTENTION
  - OVEREXCITATION
- } OF UPPER GI TRACT (DUODENUM ESP.)  
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STRONG STIMULUS

## BASIC MECHANISM:-

SENSORY SIGNALS ORIGINATE FROM PHARYNX, ESOPHAGUS, STOMACH,  
UPPER PART OF S. INTESTINE

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BY VAGAL & SYMPATHETIC AFFERENT FIBRES

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BRAINSTEM - AREA POSTEMA ≡ 'VOMITING CENTER'

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MOTOR IMPULSES → 5<sup>th</sup>, 7<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup> CN → TO UPPER GIT  
→ VAGAL & SYMP. N. → TO LOWER GIT  
→ SPINAL N. → DIAPHRAGM & ABDOMINAL MUSCLES

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ANTIPERISTALSIS

↓  
VOMITING ACT



## ANTIPERISTALSIS :-

- PERISTALSIS UP THE DIGESTIVE TRACT
- OCCURS MANY MINUTES BEFORE VOMITING
- RATE → 2-3cm/sec
- PUSH LOWER S. INTESTINAL CONTENT TO DUODENUM & STOMACH WITHIN 3-5 MINTS.

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UPPER PORTION OF GIT, ESP. DUODENUM BECOMES OVERDISTENDED

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VOMITING ACT.

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AT ONSET OF VOMITING,

- STRONG INTRINSIC CONTRACT<sup>N</sup> OCCURS IN BOTH DUODENUM & STOMACH
- PARTIAL RELAXATION OF ESOPHAGEAL-STOMACH SPHINCTER
- VOMITUS STARTS MOVING TO ESOPHAGUS

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VOMITING ACT



## VOMITING ACT :-

- 1) DEEP BREATH
- 2) RAISING OF HYOID BONE
- 3) LARYNX TO PULL UPPER ESOPHAGEAL SPHINCTER OPEN
- 4) CLOSING OF GLOTTIS TO PREVENT REFLUX OF VOMITUS IN LUNGS.
- 5) LIFTING OF SOFT PALATE TO CLOSE INTERNAL NARES.
- 6) STRONG DOWNWARD CONTRACTION OF DIAPHRAGM
- 7) SIMULTANEOUS CONTRACTION OF ALL ABDOMINAL WALL MUSCLES

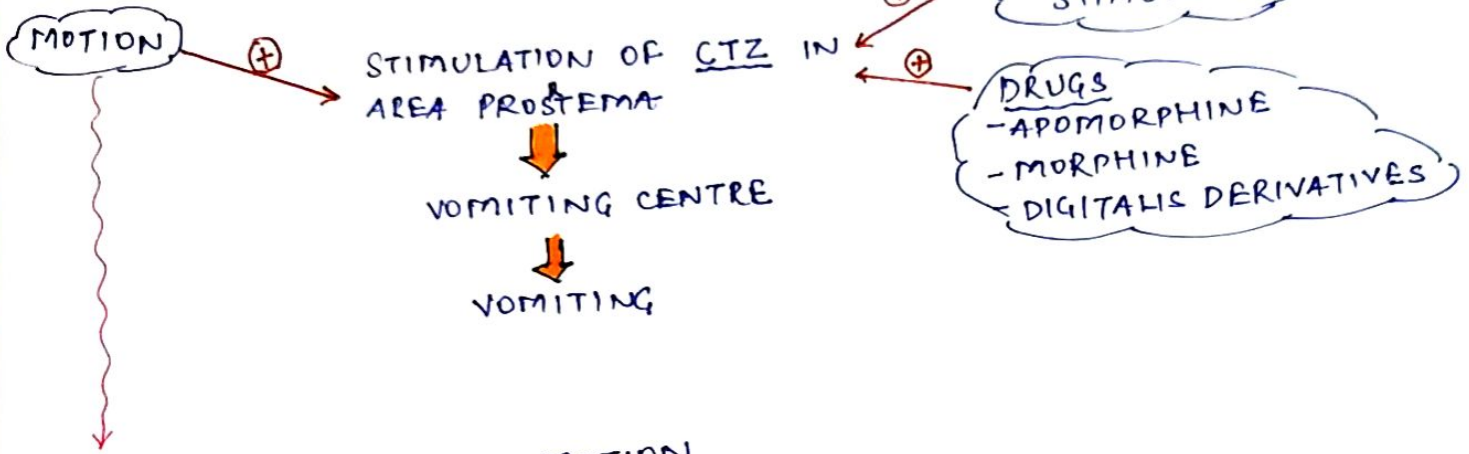


SQUEEZING OF STOMACH BETWEEN DIAPHRAGM AND ABDOMINAL MUSCLES



FINALLY, LOWER ESOPHAGEAL SPHINCTER OPENS COMPLETELY & EXPULSION OCCURS

# CHEMORECEPTOR TRIGGER ZONE:-



RAPIDLY CHANGING & -  
DIRECTION

