

A close-up photograph of a red mushroom with white spots, likely an Amanita muscaria, growing in a field of dry grass. The mushroom has a bright red cap with numerous white, irregular spots and a white stem. The background is a dense field of dry, yellowish-brown grass.

The Gut

common problems

- vomiting
- diarrhoea
- ulcers
- ileus
- colic
- constipation
- bloat



A photograph of a red mushroom with white spots, likely an Amanita muscaria, growing in a field of dry grass. The mushroom is the central focus, with its bright red cap and white spots contrasting against the muted, brownish-green background of the grass. The text 'vomiting' is overlaid in yellow on the upper part of the mushroom's cap.

vomiting

- **fluids**
- **(anti-emetics)**

A red mushroom with white spots, likely a fly agaric, is the central focus of the image. It is surrounded by dry, yellowish-brown grass. The word 'diarrhoea' is written in yellow text across the top of the mushroom's cap.

diarrhoea

- **fluids**
- **motility reducers**
- **(antibiotics)**
- **(anti-inflammatories)**
- **(wormers)**

A red mushroom with white spots, likely an Amanita muscaria, is growing in a field of dry grass. The mushroom has a bright red cap with numerous white, irregular spots. The stem is thick and white. The background is a dense field of dry, yellowish-brown grass.

ulcers

- proton pump inhibitors
- H₂ antagonists
- coating agents

A red mushroom with white spots, likely an Amanita muscaria, is growing in a field of dry grass. The mushroom has a bright red cap with numerous white, irregular spots. The stem is white and appears to have a small, dark, web-like structure at the base. The background is a dense field of dry, yellowish-brown grass.

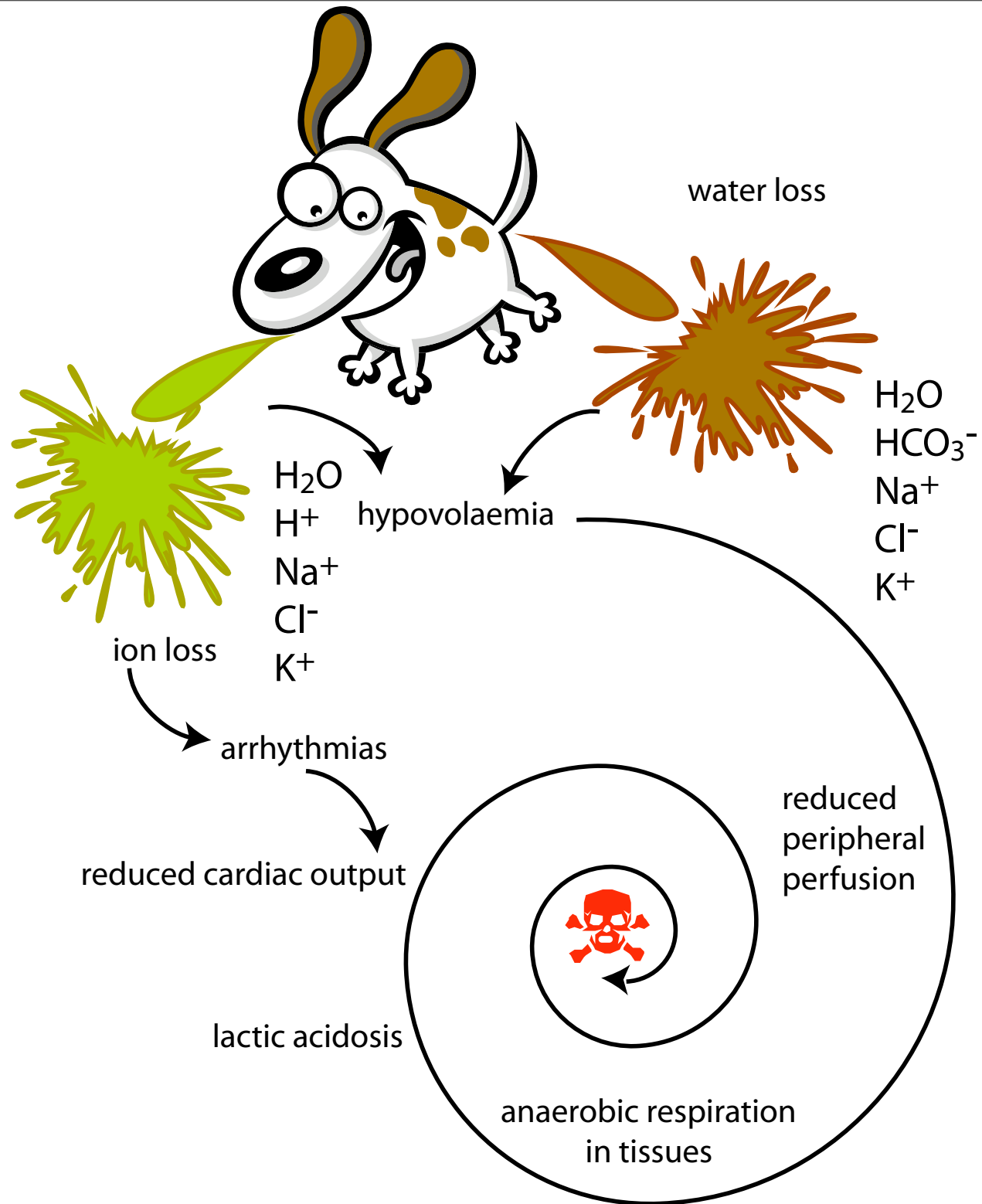
colic

- analgesics
- fluids
- motility reducers

constipation

- laxatives
- (prokinetics)





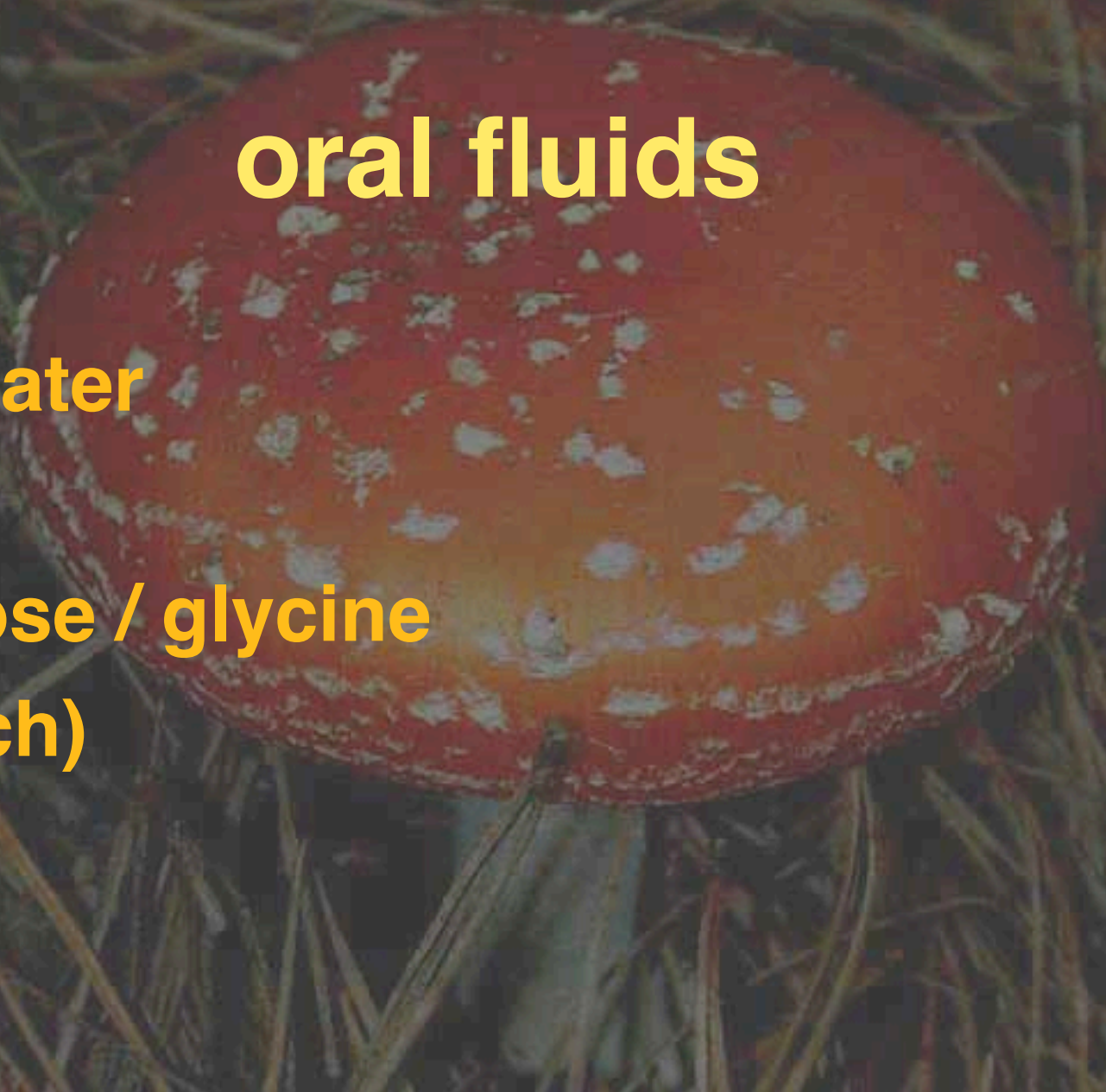
A large, red mushroom with white spots, resembling a fly agaric, is the central focus of the image. It is set against a background of dry, brown grass. The text 'fluids' is overlaid on the mushroom's cap in a bold, yellow font.

fluids

- oral best
- iv if necessary
- other routes
 - sc not much use
 - im no use
 - ip can be dangerous
 - intraosseous painful

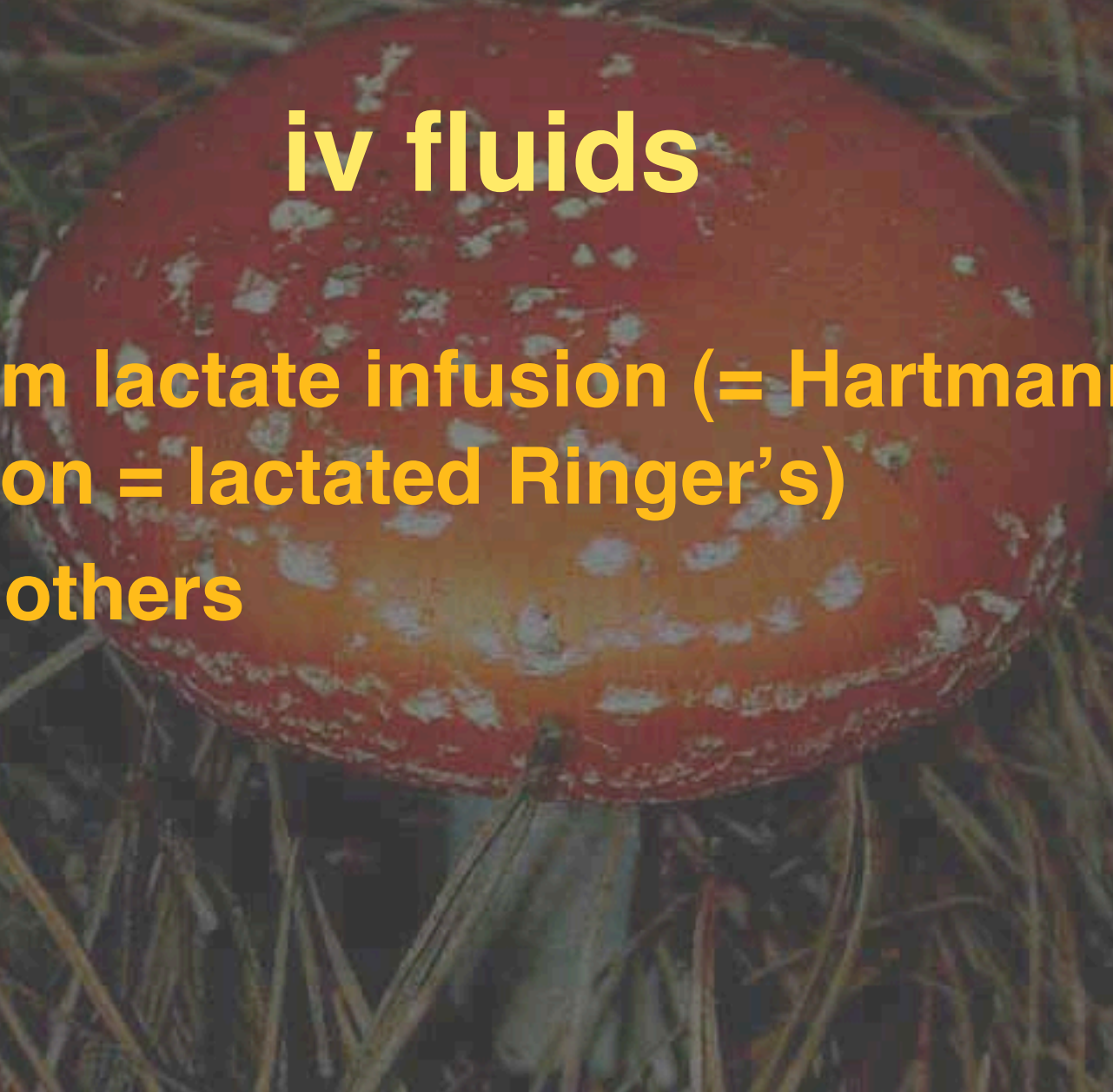
oral fluids

- tap water
- salt
- glucose / glycine
- (starch)



iv fluids

- **sodium lactate infusion (= Hartmann's solution = lactated Ringer's)**
- **lot of others**

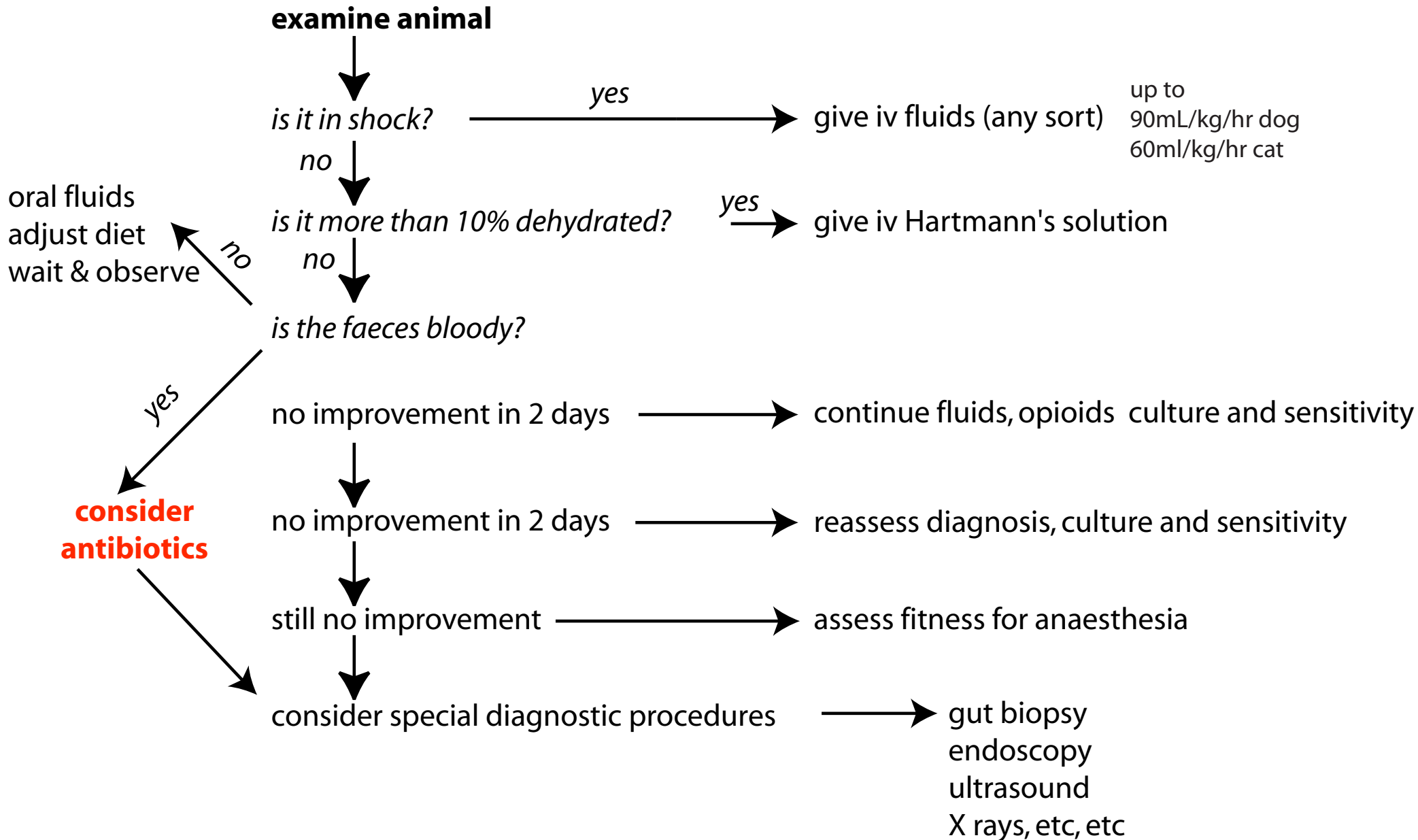


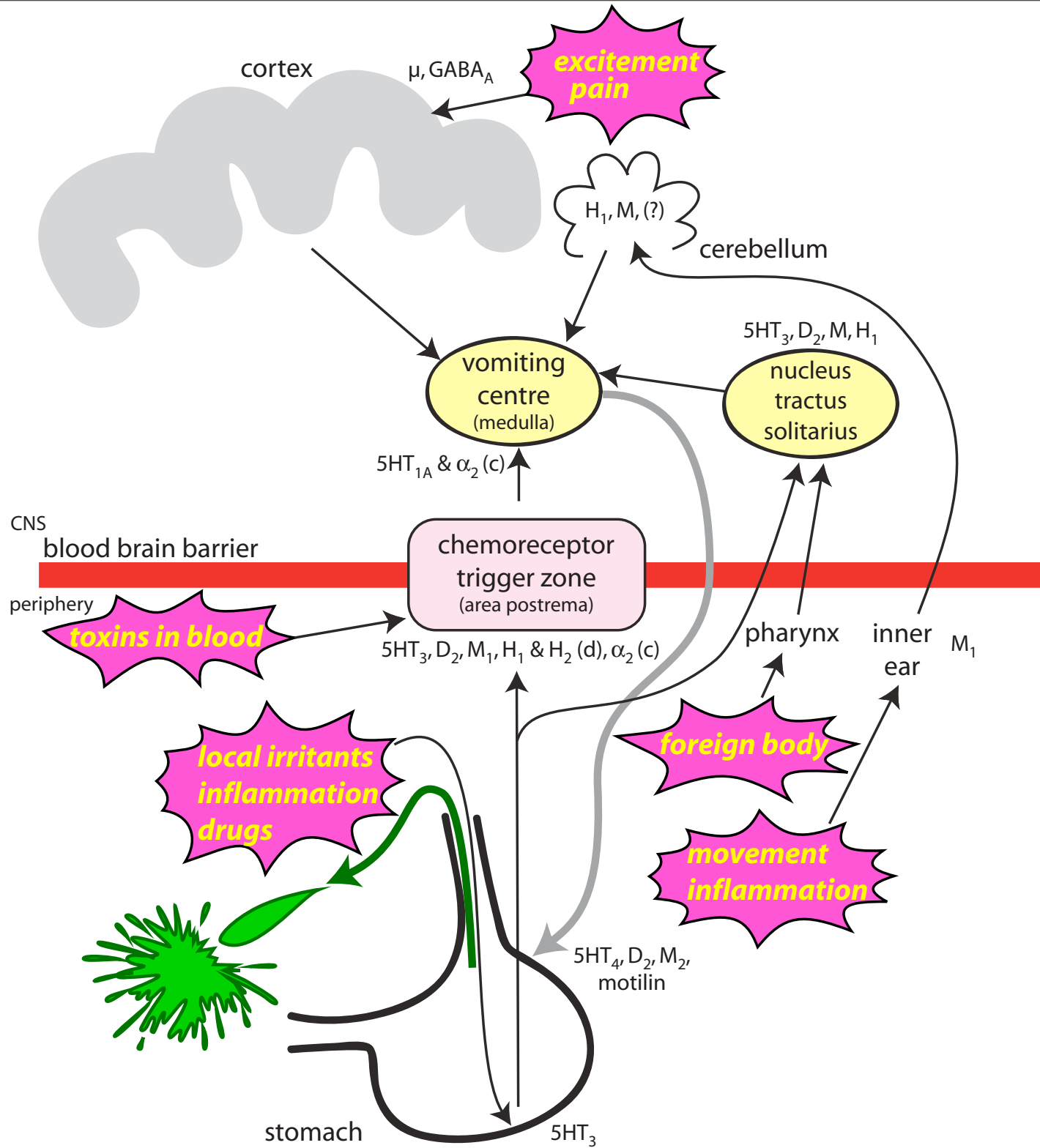
iv additives

- KCl
- NaHCO₃



my approach





A red mushroom with white spots, resembling a fly agaric, is centered in the background. The text is overlaid on the left side of the image.

anti-emetics

- **phenothiazines**
 - **perchlorphenazine**
- **dopamine antagonists**
 - **metaclopramide**
 - **droperidol**
- **5HT3 antagonists**
 - **ondansetron**
- **(antihistamines)**
- **(anticholinergics)**

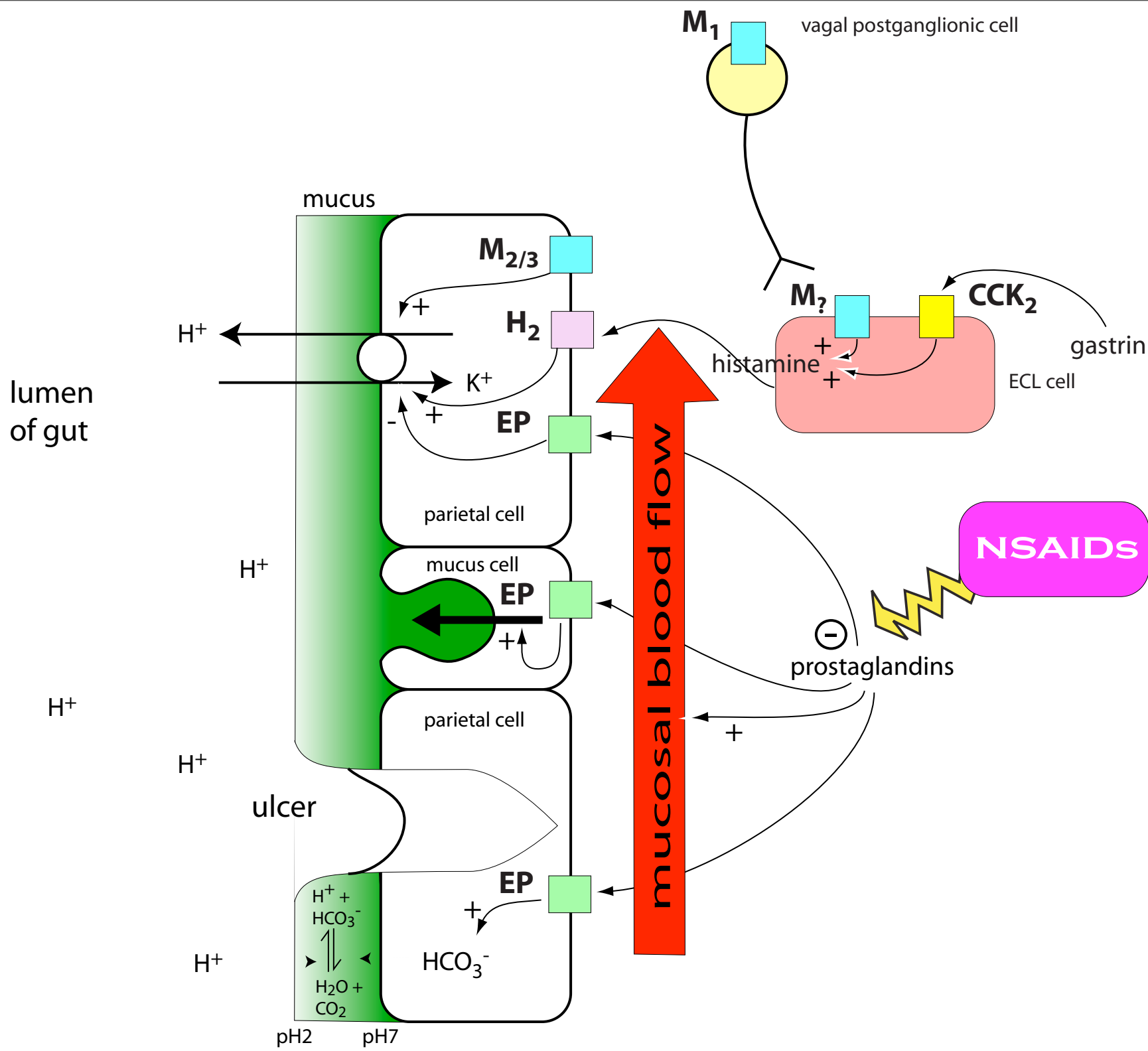
A red mushroom with white spots, likely an Amanita muscaria, is the central focus of the image. It is surrounded by dry, yellowish-brown grass. The word "emetics" is written in yellow text across the top of the mushroom's cap.

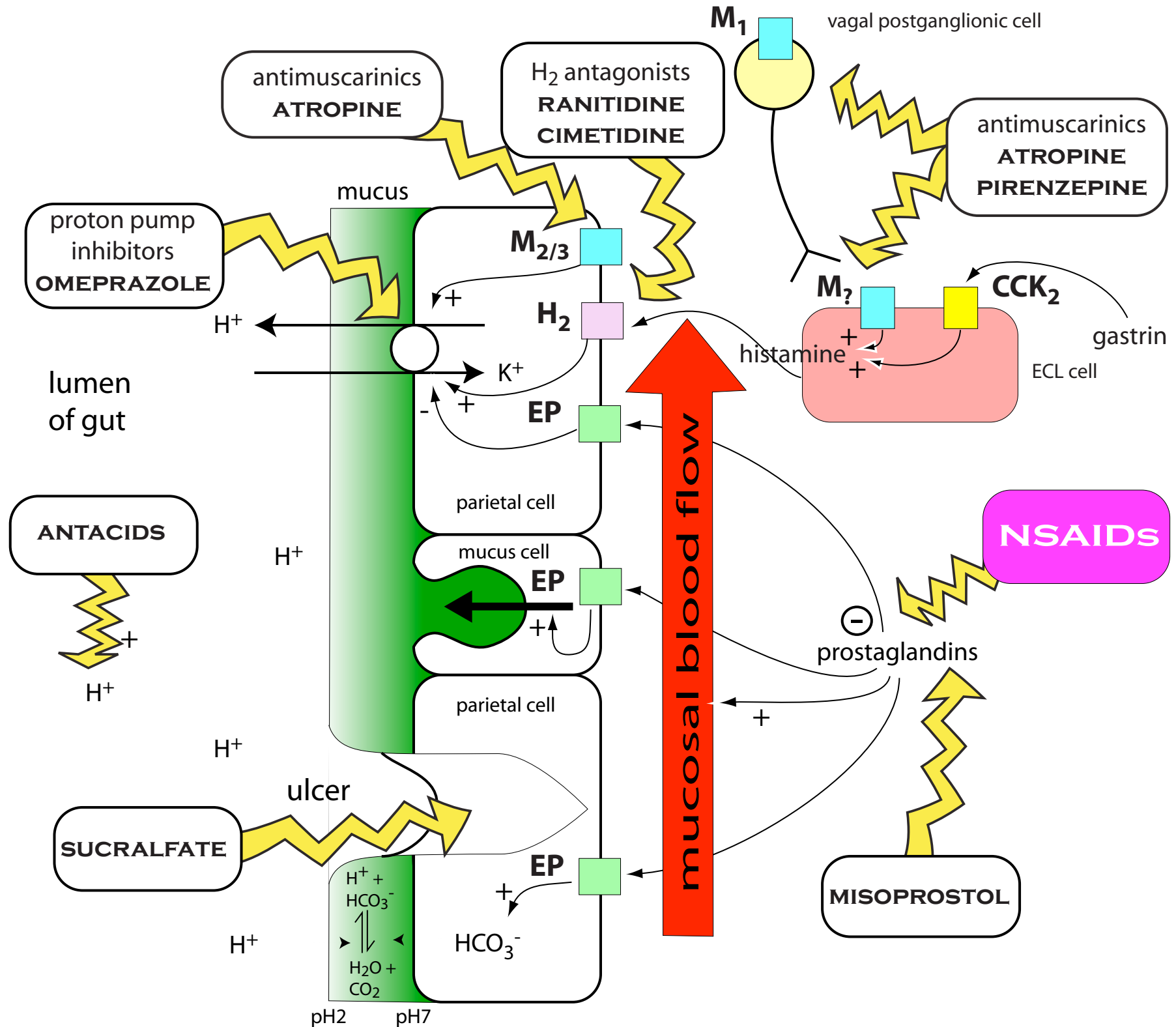
emetics

- apomorphine
- xylazine
- mustard
- saturated salt solutions

ulcer drugs

- anticholinergics
- prostaglandins
- H₂ antagonists
- proton pump inhibitors
- antacids
- local protectants
- antibiotics





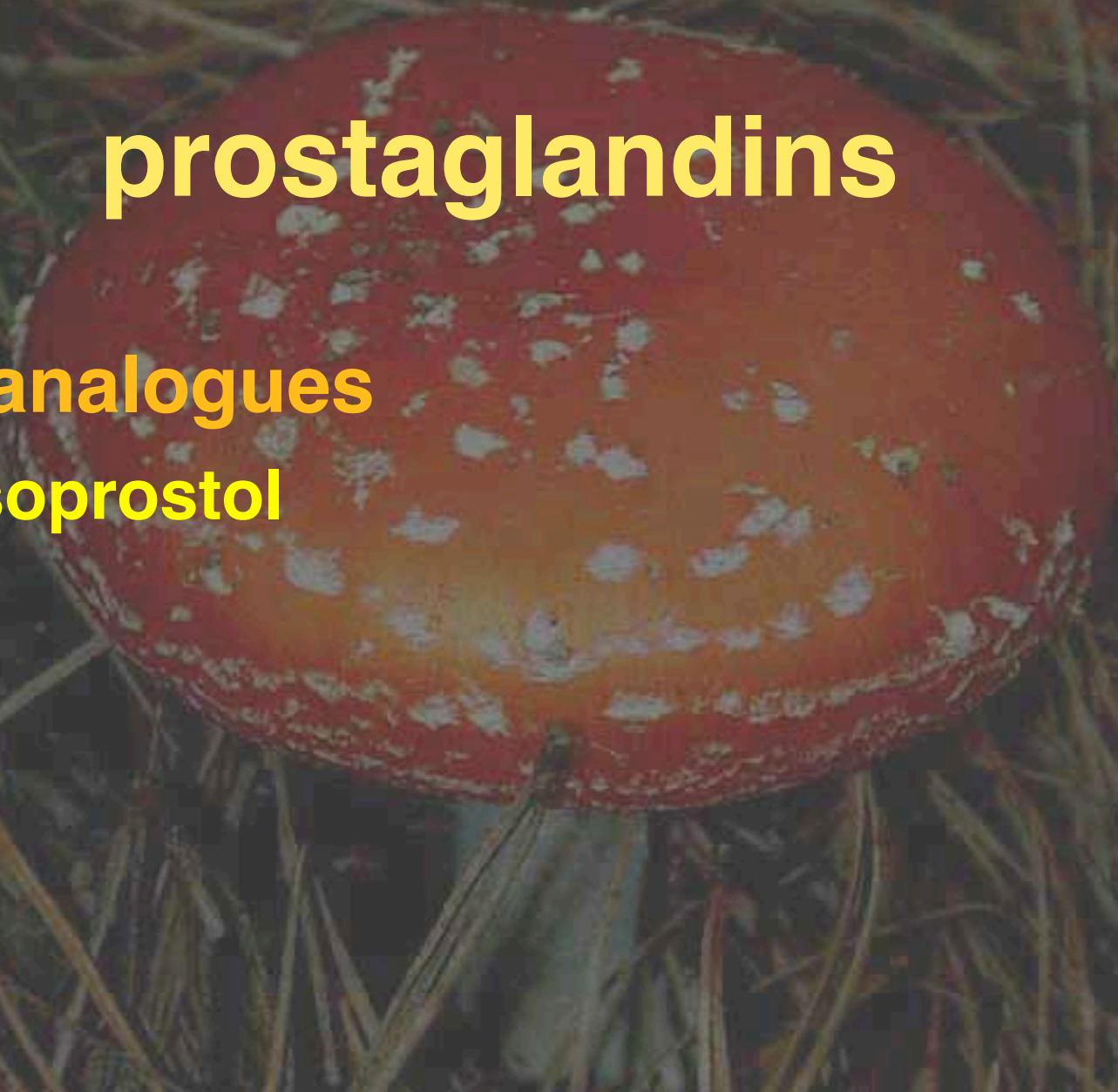
anticholinergics

A red mushroom with white spots, likely an Amanita muscaria, growing in a field of dry grass. The mushroom is the central focus of the image, with its bright red cap and white spots contrasting sharply with the dry, brownish-yellow grass. The text 'anticholinergics' is overlaid on the top right of the image in a bold, yellow font.

- **M₁ antagonists**
 - **pirenzepine**
- **not atropine**

prostaglandins

- PGE analogues
 - misoprostol



antihistamines

A red mushroom with white spots, likely a fly agaric, is centered in the background. The mushroom has a bright red cap with numerous white, irregular spots and a thick, white, ringed stem. It is growing in a field of dry, yellowish-brown grass. The overall image has a dark, semi-transparent overlay, making the text stand out.

- **H₂ antagonists**
 - **cimetidine**
 - **ranitidine**
 - **famotidine**

proton pump inhibitors

- omeprazole
- pantoprazole
- lansoprazole



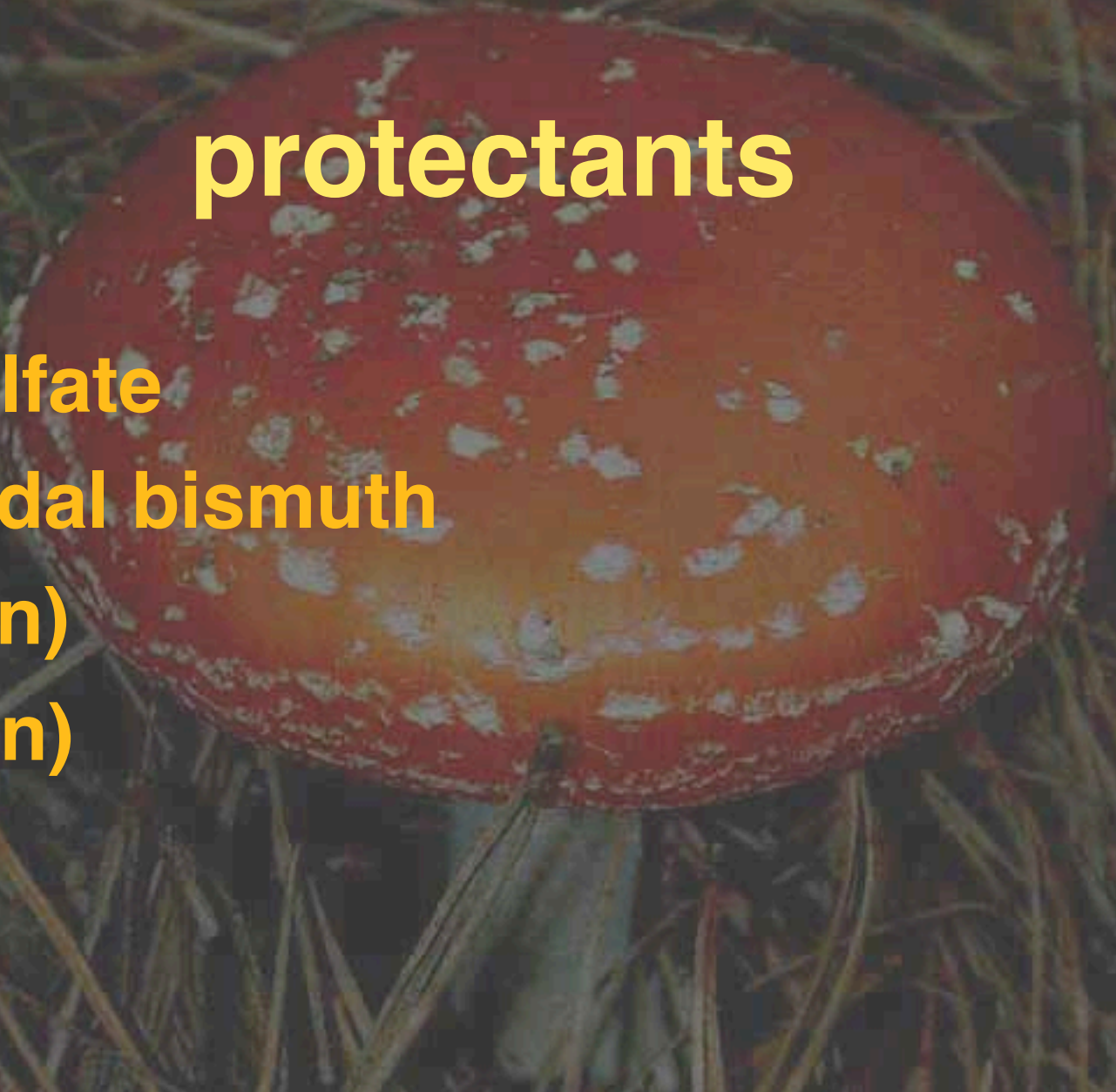
A red mushroom with white spots, likely an Amanita muscaria, is the central focus of the image. It is positioned in the upper right quadrant, with its cap and stem visible. The background is a dense field of dry, yellowish-brown grass. The overall image has a dark, slightly desaturated tone, with the mushroom's red color standing out. The word 'antacids' is written in yellow text across the top of the mushroom's cap.

antacids

- aluminium
 - hydroxide
- magnesium
 - hydroxide
 - carbonate
 - oxide
 - trisilicate
- not much use

protectants

- **sucralfate**
- **colloidal bismuth**
- **(kaolin)**
- **(pectin)**



A red mushroom with white spots, likely an Amanita muscaria, is the central focus of the image. It is positioned in the upper right quadrant, with its cap and stem visible. The background is a dense field of dry, yellowish-brown grass. The text 'gut motility' is overlaid on the mushroom's cap in a large, bold, yellow font.

gut motility

- **prokinetics**
 - metoclopramide
 - erythromycin
- **spasmolytics**
 - anticholinergics
 - opioids

A red mushroom with white spots, likely an Amanita muscaria, is the central focus of the image. It is growing in a field of dry, yellowish-brown grass. The mushroom's cap is bright red with numerous white, irregular spots. The stem is white and appears slightly thick. The background is a dense field of dry grass, creating a textured, natural setting. The overall lighting is soft, and the colors are somewhat muted, giving it a slightly somber or cautionary feel.

opioids

- loperamide
- diphenoxylate
- (morphine)

A red mushroom with white spots, likely an Amanita muscaria, is growing in a field of dry grass. The mushroom is the central focus of the image, with its bright red cap and white spots contrasting against the dry, brownish grass. The text is overlaid on the left side of the image.

antibiotics

- **not usually indicated**
- **give if**
 - **there is evidence of invasion**
 - **a specific pathogen has been cultured**

pre & probiotics

- the future???



A red mushroom with white spots, possibly a fly agaric, is the central visual element. It is set against a background of dry, brown grass. The text is overlaid on the image in a yellow, sans-serif font.

anti-inflammatories

- **inflammatory bowel disease**
 - **sulphasalazine**
 - **olsalazine**
 - **mesalazine**
- **not usually NSAIDs or steroids**

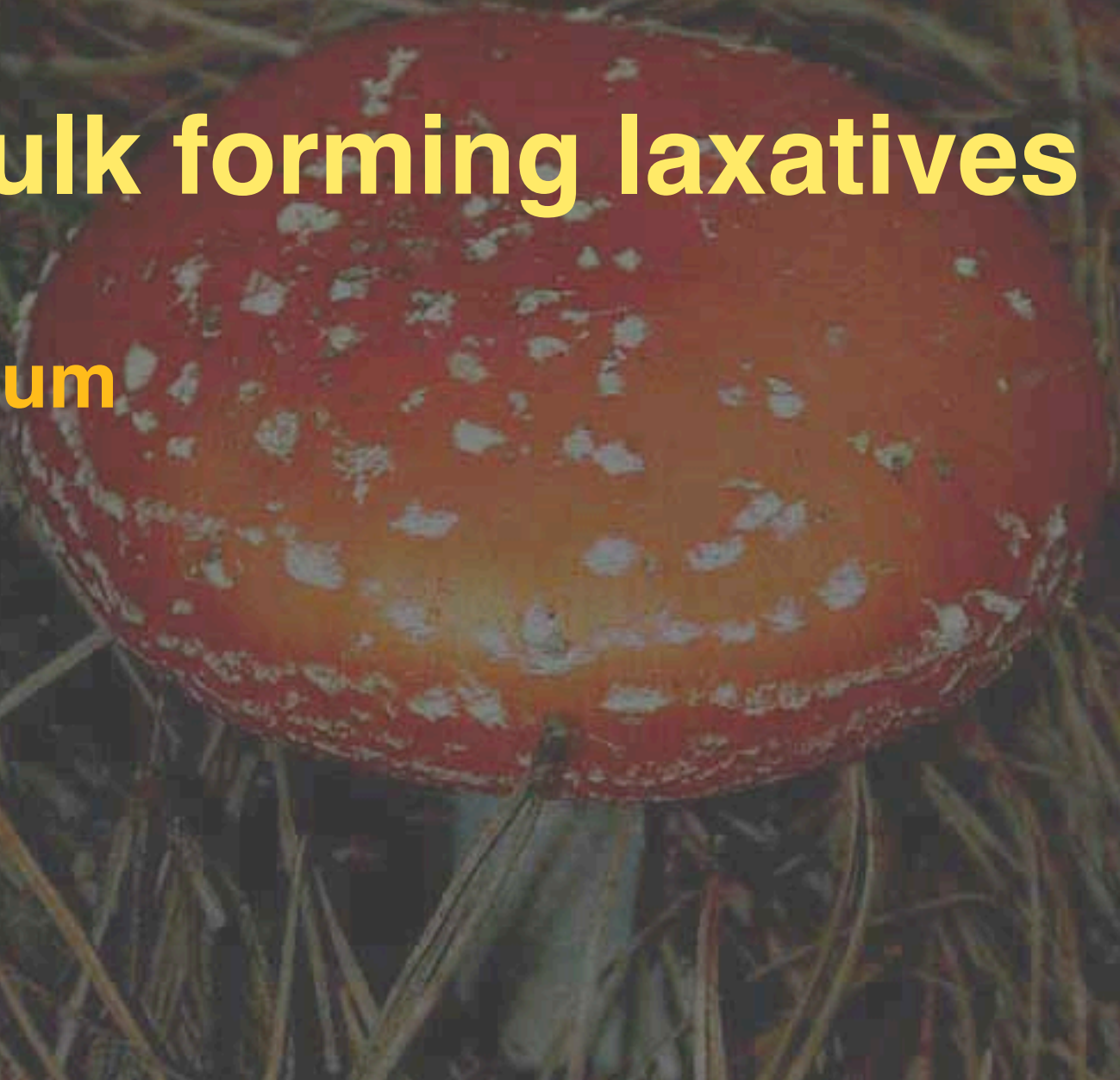
A large, red mushroom with white spots, resembling a fly agaric, is the central focus of the image. It is set against a background of dry, brown grass. The word 'laxatives' is written in yellow text across the top of the mushroom's cap.

laxatives

- **enemas**
 - **soapy water**
- **bulk forming laxatives**
- **osmotic laxatives**
- **lubricant laxatives**
- **irritant laxatives**

bulk forming laxatives

- **psyllium**
- **bran**



osmotic laxatives

- lactulose
- MgSO_4



lubricant laxatives

- liquid paraffin (= mineral oil)
- white soft paraffin (= petrolatum, Vaseline)
- do NOT use
 - paraffin oil (= kerosene)
 - paraffin wax (= paraffin)

irritant laxatives

- **rhubarb**
- **senna**





What would you do?

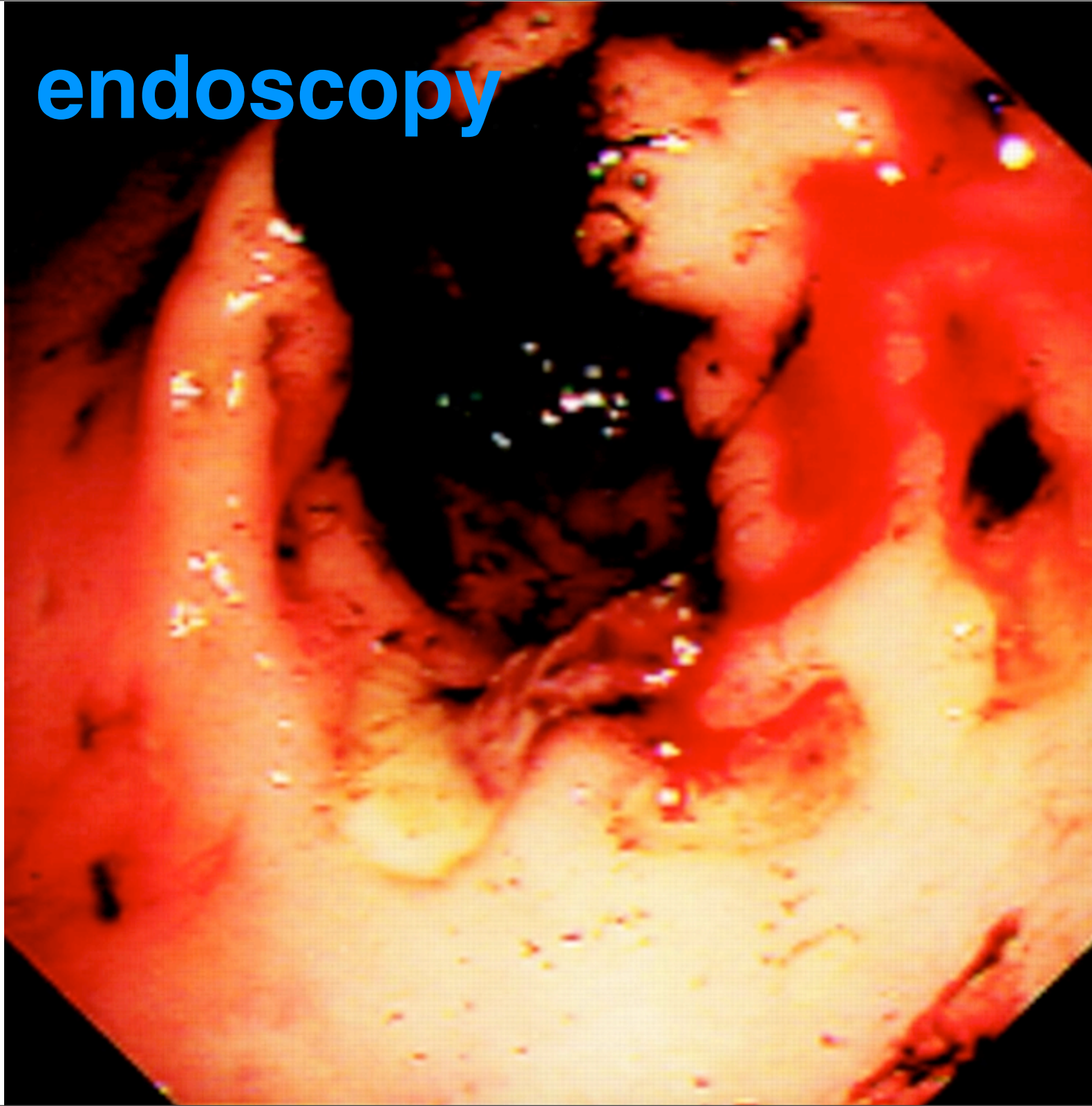


what would you do?



- 8yr old
- hip lameness
- on NSAIDs for 2 wks
- now off food & miserable

endoscopy



problem

- **ulcers**



treatment

- misoprostol?
- ranitidine?
- omeprazole?
- stop NSAIDs?



the gut

- treatment of diarrhoea - give fluids - po if possible, iv if not, then possibly opioids
- do NOT give antibiotics unless bacteria are invading mucosa - they often cause diarrhoea
- vomiting - iv fluids, anti-emetics only for persistent vomiting
- ulcers - H2 blockers, proton pump inhibitors or sucralfate - not antacids or NSAIDs
- ileus - metaclopramide or erythromycin
- colitis - sulphasalazine