H. PYLORI AND NON-ULCER DYSPEPSIA.
This is the term used in patients with ulcer-like symptoms but in whom no ulcer is found at endoscopy. This is a common situation and there are many possible causes. If H. pylori is found it should be eradicated but often some symptoms persist and other measures such as dietary changes, stopping smoking and stress management should be implemented.

Dr Colin Macdougall, FRCP(UK)
WHAT IS HELICOBACTER PYLORI?
Helicobacter pylori (H. pylori) is a bacterium that lives in the lining of the human stomach. It is very common and estimates suggest that about 75% of adults in Saudi Arabia are infected by H. pylori. With no treatment it usually lasts for life and causes no problems but in some people it can damage the stomach lining. It is responsible for inflammation of the stomach and also is the main cause of stomach and duodenal ulcers. It may be associated with some forms of stomach cancer but this only happens in a very small minority of infected people much later in life.

The source of the infection is uncertain but it is probably transmitted by contact with stomach contents from an infected person and spread between family members is common. Good personal hygiene is the most important preventative measure. It does not appear to be spread by animals or infected food or water.

PROBLEMS CAUSED BY H. PYLORI.
01 Gastritis. This inflammation of the stomach lining occurs in all people infected by H. pylori and, although some people may have upper abdominal discomfort or nausea, most have no symptoms. Other factors may also cause gastritis such as excessive cigarette smoking and the use of aspirin or anti-inflammatory drugs.

02 Stomach Ulcer. This is a raw area in the stomach lining which causes pain in the upper abdomen. 70% are caused by H. pylori (the rest are usually caused by anti-inflammatory drugs.)

03 Duodenal Ulcer. This is a raw area in the lining of the duodenum and at least 90% are due to H. pylori. Stomach and duodenal ulcers may have serious complications such as bleeding or perforation. Ulcers are often easily treated with drugs to lower acid but they will all recur if these drugs are stopped. If H. pylori is the cause, eradication of the bacteria will rapidly improve the symptoms and will permanently cure the ulcer and prevent any future complications. Because of the small possibility of stomach ulcers becoming malignant, all patients with stomach ulcers need a second endoscopy after treatment to confirm healing.

04 Stomach Cancer. Some forms of stomach cancer occur more often in people with H. pylori infection but the risk is very small and many other factors contribute. Eradication of H. pylori has not been proven to reduce the chance of developing stomach cancer.

TESTS FOR H. PYLORI.
The most accurate method to detect H. pylori infection is by a chemical reaction done on a biopsy of the stomach lining at endoscopy. This is a very simple and safe test which can also assess whether there is any inflammation of the stomach lining or peptic ulcer (stomach or duodenal ulcers.) Blood tests for H. pylori are less accurate but may be useful as screening tests, for example in family members or population groups. The best test to judge successful eradication of H. pylori after treatment is a breath test but this is not currently available.

WHO SHOULD BE TESTED FOR H. PYLORI?
Any person with a stomach or duodenal ulcer, or a previous history of either, should be tested for H. pylori and treated if the test is positive. The situation is more controversial if the ulcer is due to anti-inflammatory drugs but most doctors now recommend treatment of H. pylori if it present in patients who need to continue their anti-inflammatory treatment.

In H. pylori -ve patients without ulcers (such as family members) the situation is more complex. Many doctors now advise treatment so as to prevent any future problems, but in each case the possible side effects should be weighed against the possible benefits.

TREATMENT OF H. PYLORI.
This requires a combination of 2 strong antibiotics and a tablet to reduce acid. There are several combinations available and most need to be taken for at least 7 days. The antibiotics used are usually 2 of the following - amoxycillin, clarithromycin or metronidazole – and the acid-suppressing drug is either omeprazole or pantoprazole. Other combinations, such as ranitidine with bismuth may also be tried. If taken correctly the H. pylori bacterium will be eradicated in 80-90% of people. The treatment may cause minor side effects such as nausea or diarrhoea but these rapidly diminish after the course is finished. It is very important that the complete course of tablets is taken otherwise the likelihood of eradicating the bacterium is greatly reduced. If the H. pylori is not eradicated another, different combination of drugs should be tried.

After successful treatment the chances of getting another infection with H. pylori are extremely low (less than 1% per year.)