

methods (culture, histology, PCR, RUT). Using the appropriate test is important to avoid diagnostic error.

Aim of the study. The aim of this paper was to review the application principles of *H. pylori* diagnostic methods in practice.

Materials and methods. A systematic literature search for both original researches and review articles in biomedical databases was made through Google scholar, PubMed and Medline.

Results. UBT is useful to confirm eradication and screening, no sampling errors, useful for children with false negative result in case PP, antibiotics intake, gastric pathologies and false positive in case of urease positive bacteria growth, also it doesn't provide data about bacterial resistance. SAT is preferred in children rather than serological and UBT which may be equivocal or difficult to perform with false positive in case of contamination or cross reaction with other species. It is affected by the stool quality without data about resistance. Serological test is the cheapest without false negative result except in early infection, which is recommended for screening because it is not influenced by GIT pathologies and drugs but without data about resistance and differentiation between active and past infection. RUT need at least 10000 organism to obtain a positive result with false negative result due to PPI and achlohydria and false positive result due to other urease positive bacteria. PCR provide data about antibiotic resistance, its limitations are the cost, equipment, time, skilled staff. Culture provide data about antibiotic resistance but it is the most expensive method and time-consuming. Histological examination limitation is due to the dependence on the operator skill, interobserver variability, site, size, number of biopsy taken and staining method type.

Conclusions. The choice of diagnostic tests to determine *H. pylori* infection status depends on the sensitivity, specificity, availability, cost, and rapidity of the results, laboratories level, the patients clinical status. Unfortunately, none of the currently used methods are able to fulfill this criteria. One solution is to combine the results of two or more techniques, and compare with results of each method being evaluated.

Key words: *H.pylori* , invasive and Non-invasive methods

PUBLIC HEALTH SECTION

326. THE EFFICACY OF DIETS FOR WEIGHT MAINTENANCE AND FUTURE WEIGHT VARIATION

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Introduction. Approximately 80% of individuals who intentionally achieve weight loss of $\geq 10\%$ body weight will regain that weight within one year (yo-yo effect). By between 1 and 5 years after finishing a hypocaloric diet, around 95% of people return to their initial weight (Brownell & Rodin, 1994).

Aim of the study. To investigate the association between history of multiple weight loss diets followed by weight regain, namely weight cycling (WCy).

Materials and methods. This study is based on a literature review of different articles from the open access data base <https://www.ncbi.nlm.nih.gov/pubmed> and scientific papers.

Results. The results show a large range of deviation due to their different intervention and follow-up-periods. In one study the high-protein diet achieves a weight maintenance of 9.7% after twelve months. In other study, low-fat diets can stabilize a 18% weight reduction from the original weight after nine months. Three study results about effectiveness of high-carbohydrate diets are available (Journal of the American Dietetic Association, 2005). One study shows a weight loss of 13% after 15 months, the second study 8% weight loss after twelve months, the third study shows 4% after 30 months. Five studies deal with the effectiveness of reduced energy consumption on a permanent weight maintenance (The Journal of Clinical Endocrinology & Metabolism, 2003). About one year after the end of intervention a weight reduction of 7.6 to 9.4% can be maintained with this type of diet. After nearly 30 months the weight reduction is 4%. Only one study deals with the effectiveness of vegan diets. It records a weight loss of 5.6% after one year and 3.5% after two years. Six studies examine formula-diets as successful weight reduction and maintenance measure. However, the results vary considerably and range from 2.5% weight reduction after 34 weeks to about 10% in the follow-up after twelve months (Dieter Korczak, 2013).

Conclusions. The aim to maintain a 10% weight loss in comparison to the original weight over a long period is challenging. These findings support the importance of designing adequate weight loss programs to achieve long-term weight maintenance. Combined programmes consisting of diet and physical activity obtain a bigger long-term weight loss than an intervention which is based only on diet.

Key words: diet, weight cycling, yo-yo effect, weight-loss.

327. THE PROBLEM OF THE HEADACHE AMONG THE STUDENTS OF VINNYTSIA NATIONAL MEDICAL PIROGOV MEMORIAL UNIVERSITY

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Introduction. According to the scientific medical literature, about 70% of patients suffer from tension headache. 64% of them do not turn to the doctor that is the problem in the diagnosis, treatment and prevention of diseases.

Aim of the study. To conduct a questionnaire among students of the VNMU and determine frequency, intensity, triggers of the headache, to find out clinical diagnoses of respondents. Determine which medicaments are most effective to relieve the symptoms of the headache.

Materials and methods. Data of students questionnaire according to the self-designed questionnaire, information from the scientific literature, statistical method

Results. Owing to questionnaire it was determined, that 195 students — all 100% — had complaints of the headache. Complaints of the low headache intensity had 45 (23%) students, of the medium intensity — 125 (63%) and of the high intensity — 27 (14%) students. The frequency of the headache was as follows: everyday — 6 (3%), 2-4 times per week — 43 (22%), once a week — 40 (21%), once a month — 37 (19%), twice a month — 35 (18%), once a few months — 16 (8%), 1-3 times per 6 months — 14 (7%) and once a year — 4 (2%). Concomitant symptoms were: weakness — 27 (14%), tachycardia — 35 (18%), nausea/vomiting — 71 (36%), sound- or photophobia — 31 (16%), increased blood pressure — 35 (18%), decreased blood pressure — 19 (10%). Triggers were: fatigue — 53 (27%), stress — 130 (67%), lack of