cytoplasmic ribonucleic protein (RNPs) such as the Jo-1 antigen^{21,22}. Some of the published data indicate that further evaluation of FANA test negative serum samples is generally unjustifiable^{23,24}. We however, believe that clinical findings remain the cornerstones for the diagnosis of rheumatic/connective tissue disease and selected tests must be used to refine the pretest assessments of disease probability

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References

- Tan, E.M., Robinson, C.A., Nakamura, R.M. ANAs in systemic rheumatic disease Postgrad. Med., 1985,78:141-148.
- Robins, W.C., Holman, H.R. and Kunkel, H.G. Complement fixation with cell nuclei and DNA in lupus erythematosus. Proc. Soc. Exp. Biol. Med., 1957.96 575-580
- 3 Ceppallini, R., Rolli, E. and Celada, F. A. DNA reacting factor in serum of a patient with lupus erythematosus diffuse. Proc. Soc. Exp. Biol. Med., 1957,96 572-575.
- 4 Pincus, T., Schur, P.H., Rose, J.A. et al. Measurements of serum DNA binding activity in SLE. N. Engl. J.Med., 1969,281,701-705.
- 5 Schur, PH and Sandson, J Immunological factors and clinical activity in systemic lupus erythematosus. N. Engl. J. Med., 1968;278:533-538.
- 6 Miniter, M.F., Stolla, B.D. and Angello, V. Reassessment of the clinical significance of native DNA antibodies in systemic lupus erythematosus. Arthritis Rheum., 1979,22 959-968.
- Weinstein, A. Laboratory diagnosis of drug-induced lupus. In Lahita, R.G. Editor. Systemic lupus. Erythernatosus. New York, John Wiley, 1987, pp. 881–882.
- 8 Burlingame, R.W. and Rubin, R.L. Drug-induced antihistone autoantibodies display two patterns of activity with substrate of chromatin. Clin. Invest., 1991;88:680-690.
- 9 Hargraves, M.M., Richmond, H. and Morton, R. Presentation of two bone marrow elements. The "Tart" Cell and "LE" Cell. Proc. Staff Meet. Mayo Clinic, 1948;23:25-28.

- Holman, H.R. and Kunkel, H.G. Reports. Affinity between the lupus erythematosus serum factor and cell nuclei and nucleoprotein. Science, 1957;126:162-165.
- 11 Cleymaet, JE and Nakamura, R.M. Indirect immunofluorescent antinuclear antibody tests, Comparison of sensitivity and specificity of different substrates Am. J. Clin. Pathol., 1972,58, 388-393.
- 12 Cheryll, M. and Linda, M.M. ANA substrate comparison study Lab. Med., 1994;25:515-519.
- Molden, D.P., Nakamura, R.M. and Tan, E.M. Standardization of the immunofluorescent test for auto-antibody to nuclear antigens (ANA): use of reference sera of defined antibody specificity. Am. J. Clin. Pathol., 1984,82,57-66.
- Bardana, E.J., Harbeck, R.J. Hoffman, A.A. et al. The prognostic and the apeutic implications of DNA anti-DNA immune-complexes in systemic rupus en the matosus (SLE). Am. J. Med., 1975,59:515-522.
- 15 Jansen, E.M., Deng, J.S., Beutner, E.H. et al. Comparison of commercial kits for the detection of anti-DNA antibodies using Crithidia lucilae. Am. J. Chin. Pathol., 1987;87:461-469.
- Ballou, S.P. and Kushner, I. Anti-native DNA detection by the crithidia lucilae method. An improved guide to the diagnosis and clinical management of systemic lupus erythematosus. Arthritis Rheum., 1979,22:321-327.
- Rubin, R.L., Joslin, F.J. and Tan, E.M. A solid-phase radioimmunoassay for antihistone antibodies in human sera. Comparison with an immunofluorescence assay. Scand. J. Immunol., 1982,15 63-70.
- Rubin, R.L., Joslin, F.J. and Tan, E.M. An improved ELISA for anti-native DNA by elimination of interference by antihistone antibodies. J. Immunol. Methods, 1983,63:359-366.
- Fritzeer, M.J. Antinuclear antibodies in the investigation of rheumatic disease. Bull. Rheum., 1985;35:1-10.
- 20 Urowitz, M.B. and Gladman, D. Antinuclear antibody-negative systemic lupus erythematosus. In. Lahita, R.G. editor. Systemic lupus erythematosus. New York, John Wiley, 1987, pp. 555-563.
- 21 Reichlin, M. and Wasicek, C.A. Clinical biological significance of antibodies to Ro/SSA Hum. Pathol., 1983,14-401-405
- 22 Tan, E.M. Antinuclear antibodies. Diagnostic markers for autoimmune disease and probes for cell biology. Adv. Immunol., 1989, 44: 93-151.
- 23 Manoussaki, M.W., Garalea, K.L., Tzioufas, A.G. et al. Testing for antibodies to ENA and to dsDNA is not indicated in FANA-negative sera. Clin. Rheumatol., 1988, 7,465-469.
- James, K. and Meek, G. Evaluation of commercial enzyme immunoassays compared for antibodies associated with autoimmune diseases. Am. J. Clin Pathol., 1992;97:559-565.

Low Dose, Short Term, Triple Therapy For Helicobacter Pylori Associated Peptic Ulcer

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Abstract

To confirm the efficacy and tolerability of a new, low-dose, short-term triple therapy, 31 endoscopically diagnosed cases of peptic ulcer who were helicobacter pylori positive by brush cytology and urease test were inducted into the study. These patients were given lansoprazole 30 mg once a day, clarithromycin 250 mg twice a day and tinidazole 500 mg twice a day for one week only. Endoscopy, urease test and methylene blue test for helicobacter pylori were repeated four weeks after stopping the therapy. Ulcer healed in all the patients while helicobacter was eradicated in 90.3% of patients (JPMA 47:228, 1997).

Introduction

Helicobacter pylori (Hp) is probably the commonest infective organism in the world with an established role in chronic type B gastric and peptic ulcer¹. Many drug combinations are available now a days^{2,3}. Standard triple therapy using bismuth, metronidazole and tetracycline gives good eradication rates but the therapy is long and complicated³, moreover, the regimen is associated with

significant side effects². The introduction of eradication regimens based on acid suppression in combination with antibiotics has yielded promising results^{2,4,5}. The combination of acid suppression with two antibiotics has provided better results³, with centers achieving eradication rates of over 80%^{2,6-8}. Considerable more work, however, is required to identify the ideal dosage and combination that will give the best eradication rates with the simplest regimen and fewest side effects. The present study was designed to confirm

the efficacy and tolerability of a new, low dose short term triple therapy for treatment of Hp associated peptic ulcer in our settings

Patients and Methods

Patients presenting with ulcer like symptoms underwent upper GI endoscopy using Fujinon F-7 endoscope observing standard procedure and precautions9. Patients with peptic ulcer were selected for the trial. Tests for Hp were carried out in each case which included rapid urease test and brush cytology. Brush cytology was done using Teflon-sheathed re-usable brush. Sample from the brush was smeared on the slide, which was air dried and stained with 1% Methylene Blue Slide was then observed by consultant pathologist under low power, high power and oil immersion lens for curved or 'S' shaped Hp. Hp stains intense violet-blue with methylene blue staining 10. Only patients with Hp positive peptic ulcer were inducted in the study. All selected patients were given cap. lansoprazole 30 mg once after breakfast, tablet clarithromycin 250 mg twice a day and tablet tinidazole 500 mg twice a day for one week only. After 4 weeks, endoscopy, rapid urease test and brush cytology were repeated. Patients were asked to report any side effects experienced.

Results

Thirty-one patients with Hp-positive (brush cytology method) peptic ulcer were included in the trial after taking informed consent. There were 22 males and 9 females. Mean age was 29.4±6.1 years. Twenty-four cases had duodenal ulcer and 7 had gastric ulcer. After taking the triple therapy for 7 days endoscopy was repeated at 4 weeks. It showed healing of ulcer in all patients. Hp done by brush cytology showed eradication in 28 patients (90.3%) while rapid urease test showed eradication in 29 (93.5%) patients. Only 2 (6.4%) patients reported metallic taste and nausea but were able to continue the therapy.

Discussion

Helicobacter pylori can be detected through a variety of invasive (urease testing, culture or histologic diagnosis of endoscopic biopsies) and non-invasive (urease breath tests, serologic tests) diagnostic tests. In our study we used a newly developed test for detection of Hp and found it to be sensitive and easy to perform. During follow-up endoscopy, one patient remained positive by this method in which urease test was negative thus showing a high sensitivity. In a recent report, brush cytology for detection of Hp, was shown to be significantly superior to culture, histology and urease testing. The association of Hp in pathogenesis and treatment of peptic ulcer and chronic active type B gastritis is well established. There is no indication to treat patients who have H pylori and non-ulcer dyspepsia or gastritis, because eradication does not reliably affect their symptoms. Current regimens for

eradication include bismuth, antibiotics and anti-secretory agents. Complex and poorly tolerated regimens may no longer be necessary, as simpler regimens appear to be as effective and better tolerated. In a recent study, combination of omeprazole with amoxicillin showed 72%¹² cure, while in another study combination of clarithromycin with omeprazole and metronidazole gave 88% cure⁶ We in one of our previous work have shown that the combination of nizatidine with clarithromycin gave 95.2% healing⁷.

Many new combinations are being tried world over, stress being laid down to develop combinations which would be of short duration, low in dosage and effective in eradicating Hp and healing the ulcer. Recently a new low dose, short term triple therapy using omeprazole 20 mg b.i.d., clarithromycin 250 mg b.i.d. and tinadazole 500 mg b.i.d. for 7 days was evaluated and found to be very effective. Healing was reported in all the cases while Hp was eradicated in 93% of patients despite no further treatment¹³. In another study, two different short term low dose combinations were tried. These consisted of omeprazole 20 mg once in the morning and clarithromycin 250 mg and metronidazole 400 mg twice daily (OCM) for 7 days or with omeprazole 20 mg once in the morning and clarithromycin 250 mg and tetracycline 500 mg twice daily (OCT) for 7 days. Hp was treated successfully in 95% patients by OCM and in 65% patients by OCT combination 14. The success of above combinations prompted us to conduct a trial using lansoprazole, clarithromy cin and tinadazole in low dose for a short period of 7 days. The results obtained were very encouraging with 100% healing of ulcers and 90.3% eradication of Hp and these results matched with those from other centres ^{13,14}. It is concluded that this low dose, short term triple therapy is very effective and well tolerated. The combination has few side effects and gave better compliance. The long term follow-up and relapse rate of these combinations remains to be seen by further studies.

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References

- Parente, F., Maconi, G., Sangaletti, O. et al. Prevalence of Helicobacter pylori infection and related gastroduodenal lesions in spouses of Helicobacter pylori positive patients with duodenal ulcer. Gut, 1996,39 629-33.
- Axon, A.T. The potential value of lansoprazole in Helicobacter pylori gradication J. Clin. Gastroenterol., 1995,20(Suppl.) S43-S47
- Walsh, J.H. and Peterson, W.L. The treatment of Helicobacter pytori infection in the management of peptic ulcer. N. Engl. J. Med., 1995, 333-984-91.
- Freston, J.W. Emerging strategies for managing peptic ulcer disease. Scand. J. Gastroenterol. Suppl., 1994;201–49-54.
- Kohli, Y, Kato, T, Azuma, T et al. Lansoprazole treatment of Helicobacter pylori-positive peptic ulcers. J. Clin. Gastroenterol., 1995,20(Suppl.1)S48-51.
- Yousfi, M.M., el-Zimaity, H.M., al-Assi, M.T. et al. Metronidazole, omeprazole and clarithromycin. An effective combination therapy for Helicobacter pylori infection. Alimen. Pharm. Ther., 1995.9. 209-12.
- Zuberi, B.F., Sheikh, R., Muzaffar, L. et al. Nizatidine and Clarithromycin. An effective combination therapy in the treatment of Helicobacter pylori associated peptic ulcer. JCPSP, 1996, 4, 196-198.

- 8 Al-Assi, M.T., Genta, R.M., Karttunen, T.J. et al. Clarithromycin-amoxycilline therapy for helicobacter pylori infection. Alimen. Pharm. Ther., 1994,8 453-6.
- 9 Kirk, R.M. Diagnostic upper gastrointestinal endoscopy. In: Dudley, H., Paries, W.J. and Cartes, D.C. eds. Rob and Smith's Operative Surgery. 4th Ed., London, Butterworths, 1983, pp. 1-7.
- 10 Mauro, D.A., Paolo, P., Giuliano, C. et al. Brush cytology. A reliable method to detect Helicobacter pylon. J. Clin. Gastroenterol., 1996,22:317-321
- Hunt, R.H. and Mohamed, A.H. The current role of Helicobacter pylori eradication in clinical practice. Scand J. Gastroenterol. Suppl., 1995,208.47-52.
- 12 Kodama, R., Fujiyama, K., Murakami, K. et al. Eradication therapy of Helicobacter pylori in gastroduodena, uteer and its long-term course. Abst. Nippon-Rinsho, 1993 Dec. 51:12, 3072.7
- Jaup, B.H. and Norrby, A. Low dose short term triple therapy for cure of Helicobacter pylori infection and healing of texticultiers. Am. J. Gastroenterol., 1995,90:943-5.
- 14 Laberz, J., Stolte, M., Ruhl, G.H. et a. Check described dose triple therapy for the eradication of Helicobacter pyloni infection. Eur. 1 Gastroenterol. Hepatol., 1995,7:9-11

Thrombocytopenia in Preeclampsia: An Earlier Detector of HELLP Syndrome

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Abstract

Platelet count was determined in eighty four pregnant women by direct visual method. Among them thirty normal pregnant women were taken as control. Twenty-seven were preeclamptic and twenty -seven eclamptic women. There was significant (P<0.01) reduction in platelet count of preeclamptic and highly significant (P<0.001) in eclamptic women as compared to controls. It is concluded that there is need to do platelet count in all pregnancy induced hypertensive women, which can be an earlier detector for HELLP syndrome (JPMA 47:230, 1997).

Introduction

Pregnancy induced hypertension is a condition occurring after 20th week of gestation and is diagnosed when two or more of the conditions are present as shown in Table I^{1,2}. Eclampsia is defined as occurrance of convulsions and or Coma in patients with signs and symptoms of preeclampsia^{3,5}. Patients with preeclampsia may present the composite picture of thrombocytopenia alongwith abnormal liver functions⁶. Thrombocytopenia is a term used to describe low platelet count i.e., platelet count less than 100,000/mm3^{6,7}. Thrombocytopenia in most patients with preeclampsia is moderately severe, the platelet count usually remains above 50,000/mm3⁸. The present study was done to see the alterations in platelet counts in patients suffering from preeclampsia and eclampsia and compare them with controls.

Patients and Methods

Eighty-four pregnant women admitted in obstetrics and gynaecology departments of Civil Hospital and Jinnah Postgraduate Medical Centre, Karachi were included in this study. Thirty had normal pregnancy and fifty-four had pregnancy induced hypertension. Both groups of women (control and patients) were in third trimester of pregnancy. None of the women had received any blood transfusion previously. About 2 ml of blood was drawn from each woman by an aseptic method from the antecubital vein puncture and was kept in a small capped bottle with anticoagulant for assessing platelet count which was estimated by direct visual method using the following formula:

Calculation

Platelet count = Number of cells counted x dilution x 10⁶
per liter Volume coated
Thus if N is the number of platelets counted in an area of 1
mm³ (0.1 ul in volume). The number of platelets per liter of blood.

 $= \frac{Nx20x10^6}{0.1}$ $= Nx10x20x10^6$

 $= N_{\rm X} 200_{\rm X} 10^6$ $= N_{\rm X} 0.2_{\rm X} 10^9$

Normal range = $150-400 \times 10^9 / I$.

Statistical Analysis

Statistical analysis was done using Chi Square method.

Results

The height, age and gestational age of pregnancy induced hypertensive women and control groups were comparable (Table 11). Weight of eclamptic women was significantly increased (P<0.001) as compared to control group and weight of precclamptic women was also markedly increased (P<0.01) as compared to normal pregnant women (Table III). Highly significant (P<0.001) increase in both systolic and diastolic blood pressure was observed in pregnancy induced hypertensive women as compared to controls (Table III). Platelet count of preeclamptic women decreased significantly (P<0.01) as compared to controls while in eclamptic women highly significant (P<0.001) decrease in platelet count was observed as compared to normal pregnant women (Table IV).