



Pure red cell aplasia caused by pegylated interferon- α -2a plus ribavirin in the treatment of chronic hepatitis C

Cheng-Shyong Chang, Sheng-Lei Yan, Hsuan-Yu Lin, Fu-Lien Yu, Chien-Yu Tsai

Cheng-Shyong Chang, Hsuan-Yu Lin, Fu-Lien Yu, Chien-Yu Tsai, Division of Hematology and Oncology, Department of Internal Medicine, Changhua Christian Hospital, Changhua City 500, Taiwan, China

Sheng-Lei Yan, Division of Gastroenterology and Hepatology, Department of Internal Medicine, Chang-Bing Show Chwan Memorial Hospital, Changhua County 505, Taiwan, China

Sheng-Lei Yan, Department and Graduate Program of Bio-industrial Technology, Dayeh University, Changhua County 51591, Taiwan, China

Fu-Lien Yu, Graduate Institute of Nursing, Chung Shan Medical University, Taichung City 40201, Taiwan, China

Author contributions: Chang CS substantial contributions to conception and design; Yan SL draft the article and final approval of the version; Lin HY revise it critically for important intellectual content; Yu FL and Tsai CY help acquisition and interpretation of data.

Correspondence to: Sheng-Lei Yan, MD, Division of Gastroenterology and Hepatology, Department of Internal Medicine, Chang-Bing Show Chwan Memorial Hospital, No 6, Lu-Gong Rd., Lugang Township, Changhua County 505, Taiwan, China. yslscsmc@yahoo.com

Telephone: +886-4-7813888 Fax: +886-4-7812401

Received: December 19, 2010 Revised: January 18, 2011

Accepted: January 25, 2011

Published online: April 28, 2011

Key words: Chronic hepatitis C; Pegylated interferon- α -2a; Pure red cell aplasia; Ribavirin

© 2011 Baishideng. All rights reserved.

Peer reviewer: William Dickey, Professor, Altnagelvin Hospital, Londonderry, BT47 6SB, Northern Ireland, United Kingdom

Chang CS, Yan SL, Lin HY, Yu FL, Tsai CY. Pure red cell aplasia caused by pegylated interferon- α -2a plus ribavirin in the treatment of chronic hepatitis C. *World J Gastroenterol* 2011; 17(16): 2155-2158 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v17/i16/2155.htm> DOI: <http://dx.doi.org/10.3748/wjg.v17.i16.2155>

INTRODUCTION

Abstract

Pure red cell aplasia (PRCA) is a rare hematological disorder which is characterized by severe anemia, reticulocytopenia and almost complete absence of erythroid precursors in bone marrow. The pathophysiology of PRCA may be congenital or acquired. To our knowledge, there is only one case report in the English literature of PRCA after pegylated interferon combination therapy for chronic hepatitis C. We report a second case of PRCA after pegylated interferon combination treatment for chronic

CASE REPORT

ologies of our case are also discussed in this paper.

deficiency. He received regular vitamin B12 injection ther

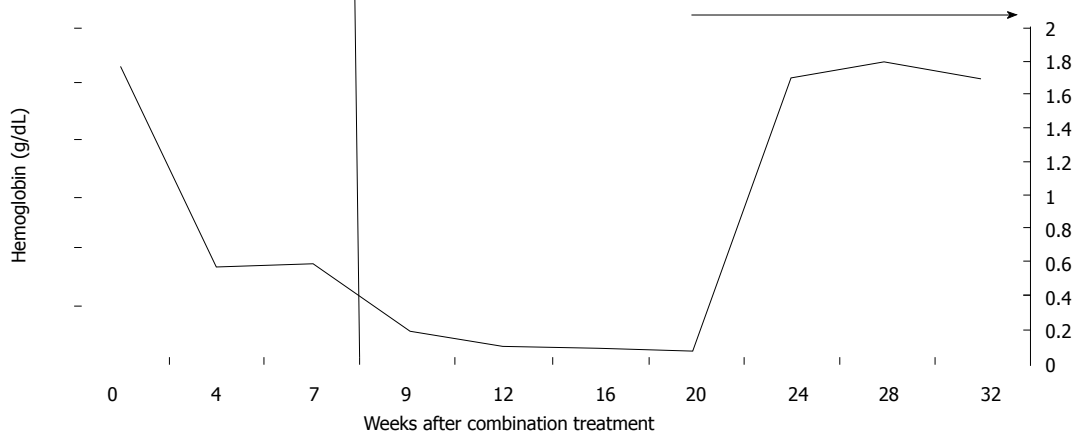


Figure 1 Hemoglobin level and reticulocyte count over time. RBC: Red blood cells.

logical findings. Oral methylprednisolone 15 mg daily was

DISCUSSION

α

. Other

findings such as severe hypocellularity, a markedly elevated

corticosteroid therapy is considered the treatment of first

et al
steroid was tapered during the first year after remission. In

- J Med* 2004; **117**: 619-620
- 15 **Sawada K**, Fujishima N, Hirokawa M. Acquired pure red cell aplasia: updated review of treatment. *Br J Haematol* 2008; **142**: 505-514
- 16 **Clark DA**, Dessypris EN, Krantz SB. Studies on pure red cell aplasia. XI. Results of immunosuppressive treatment of 37 patients. *Blood* 1984; **63**: 277-286
- 17 **Al-Awami Y**, Sears DA, Carrum G, Udden MM, Alter BP, Conlon CL. Pure red cell aplasia associated with hepatitis C infection. *Am J Med Sci* 1997; **314**: 113-117
- 18 **Mamiya S**, Itoh T, Miura AB. Acquired pure red cell aplasia in Japan. *Eur J Haematol* 1997; **59**: 199-205
- 19 **Lahner E**, Annibale B. Pernicious anemia: new insights from a gastroenterological point of view. *World J Gastroenterol* 2009; **15**: 5121-5128
- 20 **Dan K**, Ito T, Nomura T. Pure red cell aplasia following pernicious anemia. *Am J Hematol* 1990; **33**: 148-150
- 21 **Robins-Browne RM**, Green R, Katz J, Becker D. Thymoma, pure red cell aplasia, pernicious anaemia and candidiasis: a defect in immunohomeostasis. *Br J Haematol* 1977; **36**: 5-13
- 22 **Goldstein C**, Pechet L. Chronic Erythrocytic Hypoplasia Following Pernicious Anemia. *Blood* 1965; **25**: 31-36
- 23 **Schattner A**. The possible involvement of interferons in acquired pure red cell aplasia. *Am J Hematol* 1988; **27**: 72-73

S- Editor Tian L **L- Editor** Webster JR **E- Editor** Ma WH