reports should be a matter of ethnic variations. In conclusion, the influence of atopic history on cord blood IgE levels was not confirmed in this study.

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References

1. Magunsson CG. Cord serum IgE in relation to family history and as predictor of atopic diseases in early infancy. Allergy 1988;43: 241-251.
2. Kaan A, Dimich-Ward H, Manfreda J, Becker A, Watson W, Ferguson A, et al. Cord blood IgE: its determinants and prediction of asthma and other allergic disorders at 12 months. Ann Allergy Asthma Immunol 2000; 84: 37-42.
3. Bergmann RL, Schulz J, Gunther S, Dudenhausen JW, Bergmann KE, Bauer CP, et al. Determinants of cord blood IgE concentrations in 6401 German neonates. Allergy 1995; 50 :65-71.
4. Asher MI, Keil U, Anderson HR, Beasley R, Crane J, Martinez F, et al. International study of asthma and allergies in childhood (ISAAC): rational and methods. Eur Respir J 1995; 8: 483-491
5. Ownby DR. Clinical significance of immunoglobulin E. In: Adkinson NF, Yunginger JW, Busse WW, Bochner BS, Holgate ST, Simons FER, editors. Middleton's allergy principles and practice. Pennsylvania : Mosby; 2003. p.1087-1103
6. Liu CA, Wang CL, Chuang H, Ou CY, Hsu TY, Yang KD. Prediction of elevated cord blood IgE levels by maternal IgE levels, and the neonate's gender and gestational age. Chang Gung Med J 2003; 26:561-9.
7. Lin YC, Wen HJ, Lee YL, Guo YL. Are maternal psychosocial factors associated with cord immunoglobulin E in addition to family history and mother immunoglobulin E? Clin Exp Allergy 2004;34:548-554.
8. Bergmann KE, Bergmann RL, Schulz J, Grass T, Wahn U. Prediction of atopic disease in the newborn :methodological aspects. Clin Exp Allergy 1990; 20: 21-26.
9. Liu CA, Wang CL, Chuang H, Ou CY, Hsu TY, Yang KD. Prenatal prediction of infant atopy by maternal but not paternal total IgE levels. J Allergy Clin Immunol 2003; 112: 899-904.
10. Michel FB, Bousquet J, Greillier P, Robinet-Levy M, Coulomb Y. Comparison of cord blood immunoglobulin E concentrations and maternal allergy for the prediction of atopic diseases in infancy. J Allergy Clin Immunol 1980; 65:422-430

Chylothorax-complicated chronic lymphocytic leukemia

To the Editor: B-chronic lymphocytic leukemia (CLL) is the most common leukemia affecting adults and may infiltrate any organ. Chylothorax is an unfrequent complication of CLL. We describe a new case of CLL complicated by chylothorax and discuss the pathophysiology of this association. A 58-year-old man had been diagnosed five years ago with CLL of B cells. He was treated by chlorambucil (2 mg daily) and then by an association of chlorambucil-cyclophosphamide (Endoxan). Approximately 1 month prior to his hospitalization, the patient had dyspnea on exertion, which had an insidious onset and gradually progressed with a productive cough. On physical examination, the patient was pale, afebrile, with a respiratory rate at 36 breaths/minute, and had signs of pleural effusion over the right lung. An abdominal examination revealed hepatosplenomegaly and no lymphadenopathy was noted. A chest X ray (Figure 1) showed a large amount of effusion on the right side with retractile opacity in the third lower right lobe, and a nodular shadow in the left lower lobe, without mediastinal adenopathy.

The laboratory study found a WBC of 88 100/mm^3 (lymphocytes 90%), hemoglobin 8.7 g/dL, platelet count 38 000/mm^3, ESR of 85 mm/hr (first hour). Hypogammaglobulinemia was found by protein electrophoresis. Arterial blood gas measurement showed hypoxemia at 71 mm Hg, transcutaneous saturation of oxygen at 93% with oxygen-therapy (2 L/mn). Thoracentesis revealed a milky pleural effusion with lymphocytes (100%), triglycerides 3.39 g/dL and cholesterol 2 mmol/L. Gram strain and culture were negative. Staining for acid-fast bacilli and culture for TB were negative in the expectoration and in the pleural fluid. Abdominal ultrasound revealed splenomegaly without lymphadenopathy or peritoneal effusion. A chest CT scan (Figure 2) showed a large effusion in the right pleura with condensation in the left lung. No abnormally enlarged lymph nodes were noted. Treatment was by conservative measures: oxygen, repeat thoracentesis and total parenteral nutrition. In evolution, a febrile episode with hypoxemia necessitated antibiotic therapy with a corticosteroid, but the patient died within 2 weeks in respiratory insufficiency.

Chylothorax results from a disruption of the thoracic duct and subsequent accumulation of chyle within the pleural space.[1] A triglyceride level greater than 110 mg/dL constitutes a diagnosis of chylothorax.[2] The most common etiology of chylothorax is malignancy (more than 50% of cases) and lymphoma accounts for 75% of cases, followed by lung carcinoma.[2,3] Other lymphocytic tumors are rarely reported, with only 6 other cases of CLL complicated by chylothorax found in the English literature.[4] The mechanism of how CLL causes chylothorax is not well understood and theories about its pathophysiology are lacking. The paucity of CLL-induced chylothorax probably is attributed to the typical lack of mediastinal lymphadenopathy in CLL.[4,5] Unlike the cases reported by Zimhony et al,[6]

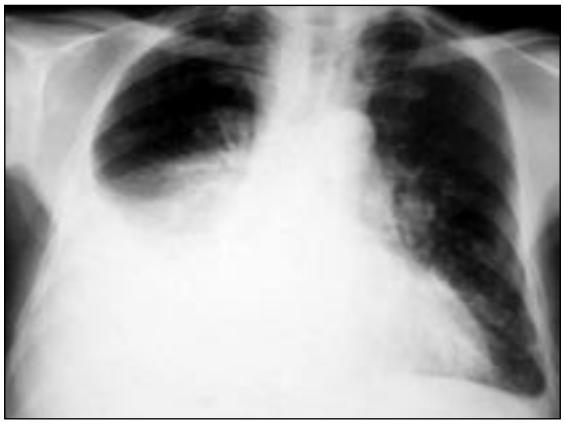

Figure 1. Chest radiograph showing a large effusion in the right side and nodular shadow in the left lower lobe, without mediastinal adenopathy.

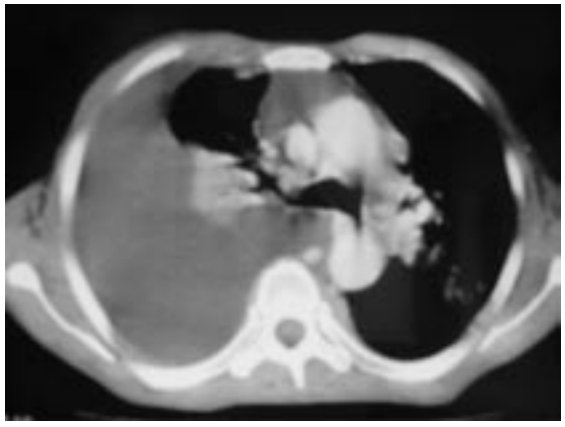

Figure 2. CT scan confirming effusion in the right pleura with condensation in the left lung without abnormally enlarged lymph nodes.

and Anton et al,[7] no obvious mediastinal lymphadenopathy was noted in our patient at the time of his evaluation. No abnormally enlarged lymph nodes were noted in the cases described by Rice et al[5] or Clinton et al.[8] Another possibility involves the flow of leukemic lymphocytes through the lymphatic system. The presence of an extremely large number of abnormal lymphocytes in CLL may cause sludging in the lymphatic system. This sludging may result in a pseudo-obstruction of either the thoracic duct or lymphatics draining the pleura, resulting in chylothorax.[5,7]

Management strategies for chylothorax comprise treatment of the underlying disease (chemotherapy and/or mediastinal irradiation for malignancy). Conservative measures include drainage of the pleural effusion (repeated thoracentesis or continuous intercostal tube drainage), maintenance of nutritional condition (low fat diet with medium-chain triglycerides, total parenteral nutrition). Chemical pleurodesis, usually with talc, may prevent the re-accumulation of the chylous effusion. This approach may be warranted in those patients who are poor candidates for more invasive surgical intervention. In the case reported by Zimhony,[6] mediastinal irradiation followed by talc pleurodesis was performed leading to complete resolution of the chylothorax; mediastinal irradiation alone was also done without efficient result.[6] Surgical therapy is proposed when conservative treatment has failed (pleuroperitoneal shunting, ligation of the thoracic duct). In our case, the rapid evolution made it impossible to try another treatment.

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References

1. M. Riquet, F. Le Pimpec. Barthes, A. Badia. Le Chylothorax. Presse Med 2002; 31:548-55.
2. G. Hillerdal. Chylothorax and pseudo-chylothorax. Eur Respir J 1997; 10: 1157-62.
3. M. G. Alexandrakis, F H. Passam, D S. Kyriakou, D. Bouros. Pleural effusions in Hematologic malignancies. Chest 2004, 125 : 15-46-55.
4. Enrique Antón. Chylothorax in Hematologic Malignancies. Chest 2005 ; 127 : 1866-1867.
5. T. W Rice, A. P Milstone. Chylothorax as a result of chronic lymphocytic leukemia: Case report and review of the literature. Southern Medical Journal 2004, 97 (3):291-294.
6. O. Zimhony, Y. Davidovitch, M. Shtalrid. Chronic lymphocytic leukaemia a complicated by chylothorax. Journal of Internal Medicine. 1994; 235: 375-377.
7. E. Antón Aranda, R. Aguinaco. Chylothorax complicating chronic lymphocytic leukemia. The Netherlands Journal of Medicine 2001; 58: 223-224.
8. H. D Clinton, A.S Bruce, S. N Markovic. Chylotorax in Chronic Lymphocytic Leukemia Patient. American Journal of Hematology 2002; 70: 237-240.

Laryngeal papillomatosis treated by oral zinc sulphate

To the Editor: Recurrent respiratory papillomatosis is a viral disease caused by the human papilloma virus (HPV). It occurs throughout the respiratory tract from the nose to the lungs. The HPV types found in these lesions are also seen in genital condylomata. Respiratory papillomatosis has a bimodal distribution, being predominant in children under 5 years and after the age of 15