

//  
//

( )

\*

CBC

(*Medac Syrea*)  
(*Signa GE*) MRI

MRI

$P < /$

MRI

( ) :

CBC

$(P < / )$

MCV

( )

EH

( )

( )

HU

Hajjar

( )

( )

( )

HU

(.)

(.)

Hb

Archive of SID

( EH=Extramedullary Hematopoiesis)

(.)

CBC

Hb

(.)

MRI EH

MRI

( )

/ / Signa GE

P&lt; /

)

(

Medac

Syrea

( )

/ ± / / ± / )

) (

( / ± / / ± /

/ ± / / ± / )

± )

(

( ±

Cr Urea CBC

MCV

NRBC

MRI .

.(P&lt; / )

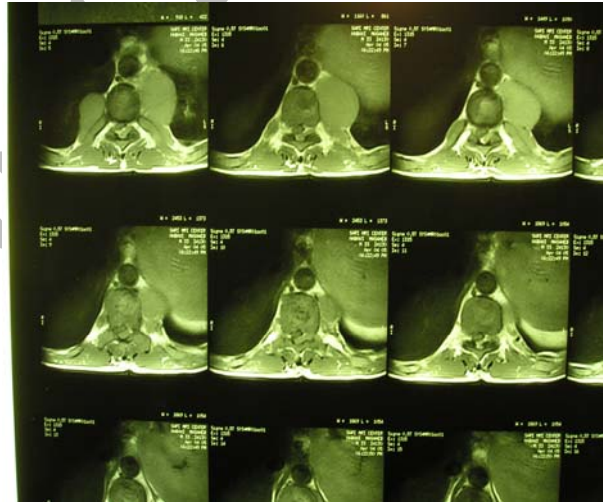
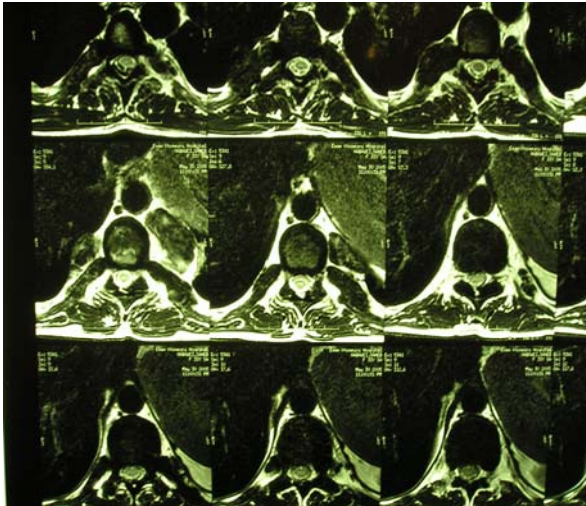
CBC				HU	HU (mg/kg/d)	CBC				HU
NRBC (%)	MCV (fl)	RBC ( $\times 10^3/\text{mm}^3$ )	Hb (gr/dl)	HU		NRBC (%)	MCV (fl)	RBC ( $\times 10^3/\text{mm}^3$ )	Hb (gr/dl)	HU
/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/

MRI .

( )

HU

/ /



Archiv

(

( )

(.)

Koch

( )

HU

( )  
HU

NRBC

( )

EH

Saxon.

Meo

( )

( )

HU

MCV

gr/dl

HU

( )

HU

F

( )

( )

(SCFADs)

( )

( )

( )

( )

HU

( )

HU

Hb F

( )

Ineffective Erythropoiesis

.( )

.( )

.( )

EH

HU

## REFERENCES

---

1. Richard Lee G .Wintrobe S. Clinical Hematology. 10<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins.1999; P:1425.
2. Castelli R, Graziadei G, Karimi M, Capellini MD. Intrathoracic masses due to extramedullary hematopoiesis. Am J Med Sci 2004; 328: 299-303.
3. Pornsuriasak P, Suwatanapongched T, Wangsuppasawad N, Ngodngamthaweasuk M, Angchaisuksiri P. Massive hemothorax in a beta-thalassemic patient due to spontaneous rupture of extramedullary hematopoiesis masses: diagnosis and successful treatment. Resoip Care 2006; 51(3): 272-6.
4. Turgut B, Pamuk GE, Vural O. An interesting presentation of intrathoracic extramedullary hematopoiesis in a patient with thalassemia. Clin Lab Haem 2000; 25: 409-12.
5. Peng MJ, Kuo HT, Chang MC. A case of intrathoracic extramedullary hematopoiesis with massive pleural effusion: Successful pleurodesis with intrapleural minocyclin. J Formos Med Assoc 1994; 93(5): 445-7.
6. Aessopos A, Tassiopoulos S, Farmakis D, Moyossakis I, Kati M, Polonifi K, et al. Extramedullary hematopoiesis-related pleural effusion: The case of beta-thalassemia. Ann Thorac Surg 2006; 81(6): 2037-43.
7. Kapelushnik J, Shaler H, Schulman H, Moser A, Tamary H. Upper airway obstruction-related sleep in a child with thalassemia intermedia. J Ped Hemat Oncol 2001; 23(8):525-6.
8. Al-Aabassi A, Murad BA. Presacral extramedullary hematopoiesis: A diagnostic confusion concerning a rare presentation. Med Princ Pract 2005; 14(5): 358-62.
9. Bruneteau G, Fenelon G, Khalil A, Girot R. Spinal cord compression secondary to extramedullary hematopoiesis in a patient with thalassemia. Rev Neurol (Paris) 2000; 156(50): 510-3.
10. Cairo H, Wegener M, Debatin KM, Kohne E. Treatment with hydroxyurea in thalassemia intermedia with paravertebral pseudotumors of extramedullary hematopoiesis. Ann Hematol 2002; 81(8): 478-82.

- 
11. Saxon BR, Rees D, Olivieri NF. Regression of extramedullary haemopoiesis and augmentation of fetal haemoglobin concentration during hydroxyurea therapy in beta thalassemia. *Br J Haematol* 1998; 101: 410-9.
  12. Meo A, Quartarone G, Piraino B, La Rosa MA, Ruggeri A, Cuppari C, et al. Intrathoracic extramedullary haemopoiesis and treatment with hydroxyurea in thalassemia intermedia. The 9<sup>th</sup> international conference on thalassemia and hemoglobinopathies. Oct 15-19, 2003 Italy.
  13. Koli-Kumar M, Mardani H, Keller MA, Guertin K, Huizdala E. Use of Hydroxyurea and recombinant erythropoietin in management of homozygous beta thalassemia. *J Ped Hemat Oncol* 2002; 24(9): 777-8.
  14. Vicari P, Figueiredo MS. Regression of extramedullary hematopoiesis with hydroxyurea therapy in beta thalassemia intermedia. *Rev Bios Hemotol* 2006; 28(1): 71-2.
  15. Voskaridou E, Kalotychou V, Loukopoulos D. Clinical and laboratory effects of long-term administration of hydroxyurea to patients with sickle-cell/Beta thalassemis. *Br J Haematol* 1995; 89: 479-84.
  16. Hajjar FM, Peason HA. Pharmacologic treatment of thalassemia intermedia with hydroxyurea. *J Pediatr* 1994; 125: 490-2.
  17. Ahmed F, Tobin MS, Cohen DF. Beta thalassemia spinal cord compression. *N Y State J Med* 1981; 81(1): 505-8.
  18. Koch CA, Li CY, Nesa RN, Tefferi A. Nonhepatosplenic extramedullary hematopoiesis: Associated diseases, pathology, clinical course, and treatment. *Mayoclinic Proceedings* 2003; 78: 1223-33.
  19. Habibzadeh F, Yadollahie M, Haghshenas M. Extra-medullary haematopoiesis in beta-thalassemia. *J Postgrad Med* 2005; 51(1): 45-6.
  20. Pace BS, White GL, Dover GJ, Boosalis MS, Faller DV, Perrin SP. Short-chain fatty acid derivatives induce fetal globin expression and erythropoiesis in vivo. *Blood* 2002; 100(13): 4640-8
  21. Perrin SP, Castaneda SA, Boosalis MS, White GL, Jones GS. Induction of fetal globin in beta-thalassemia: Cellular obstacle and molecular progress. *Ann NY Acad Sci* 2005; 1054(1): 257-65.
  22. Perrin SP. Fetal globin induction-Can it cure beta thalassemia? *Hematology* 2005;1: 38-44.
  23. Perrine S. Fetal globin induction in beta thalassemia: time to apply the first molecular treatment approach. The 10<sup>th</sup> international conference on thalassemia and hemoglobinopathies. Jan 7-10, 2006. Dubai. P:28.
  24. Vinchinsky E. Clinical advances in fetal hemoglobin modulators. The 10<sup>th</sup> international conference on thalassemia and hemoglobinopathies. Jan 7-10, 2006. Dubai. P: 28.
  25. Loukopulos D. Hydroxyurea in thalassemia intermedia. The 10<sup>th</sup> international conference on thalassemia and hemoglobinopathies. Jan 7-10, 2006. Dubai. P: 47.
  26. Bradai M, Abad M T, Pissard F, Lamraoui F, Skoponiski L, Montalembert M. Hydroxyurea can eliminate transfusion requirement in children with severe beta-thalassemia. *Blood* 2003; 102(4): 1529-30.

- 
28. Ehsani MA, Hedayati-Assl AA, Zeinali S, Bagheri AR. Therapeutic effect of hydroxyurea in intermediate thalassemia patients. The 10<sup>th</sup> international conference on thalassemia and heamoglobinopathies. Jan 7-10, 2006. Dubai. A255.
  29. Karimi M, Darzi H, Yavarian M. Hematologic and clinical responses of thalassemia intermedia patients to hydroxyurea during 6 years of therapy in Iran. *J Ped Hemat Oncol* 2005; 27(7): 380.
  30. Loukopoulos D, Voskaridou E, Stamoulakatou A, Kalotychou V, Loutradi A, Cozma G, et al. Hydroxyurea therapy in thalassemia. *Ann N Y Acad Sci* 1998; 850: 120-8.
  31. Yeke Z, Rahiminejad MS. Hydroxyurea is effective in treating chronic leg ulcer of thalassemia intermedia. The 10<sup>th</sup> international conference on thalassemia and heamoglobinopathies. Jan 7-10, 2006. Dubai. A262.
  32. Kosaryan M, Mojtahedzadeh F, Tabarestani H, Vahidshahi K. Evaluation of bone density in the thalassemic patients: Does hydroxyurea can decrease the severity of osteoporosis? *Ped Endocrinol Rev* 2004; 2 sup2: 203-6.

Archive of SID