No. 5 study meeting of H.P.C.

the series of MDS PET-CT (3)

Kunio Hayashi , Hirakata Khosai Hospital

Hematological Examination

a. Peripheral blood

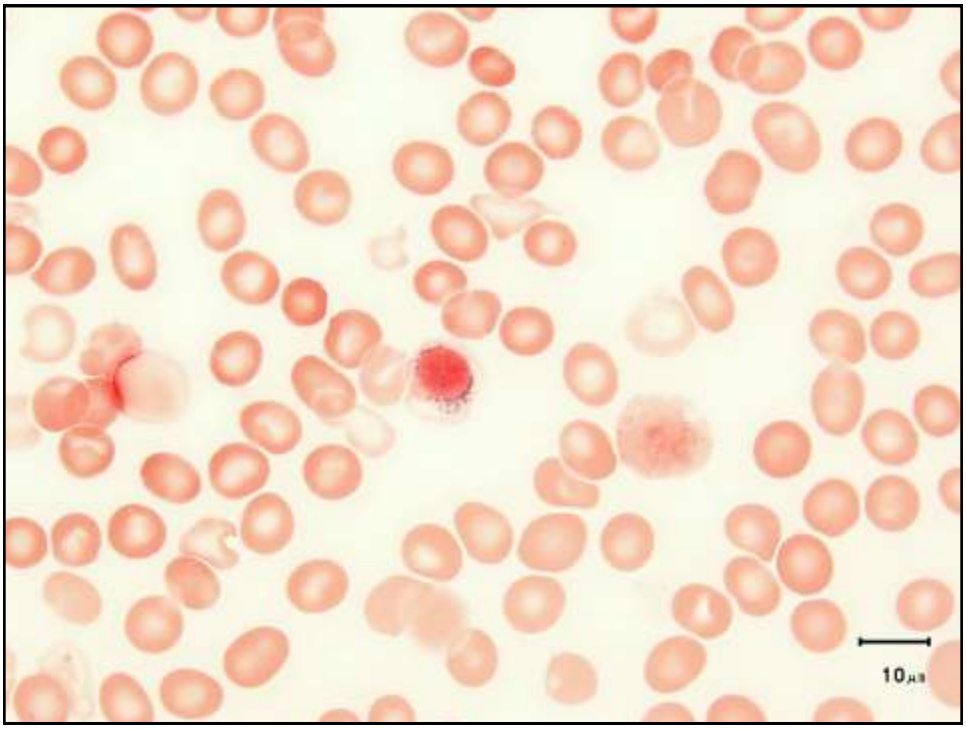
WBC : Hb : Plt = 4200 : 8.0 : 5.3
N 16, L 51,
Blast3%,Myelo 14, Meta 7
reti 1.4, MCV 98

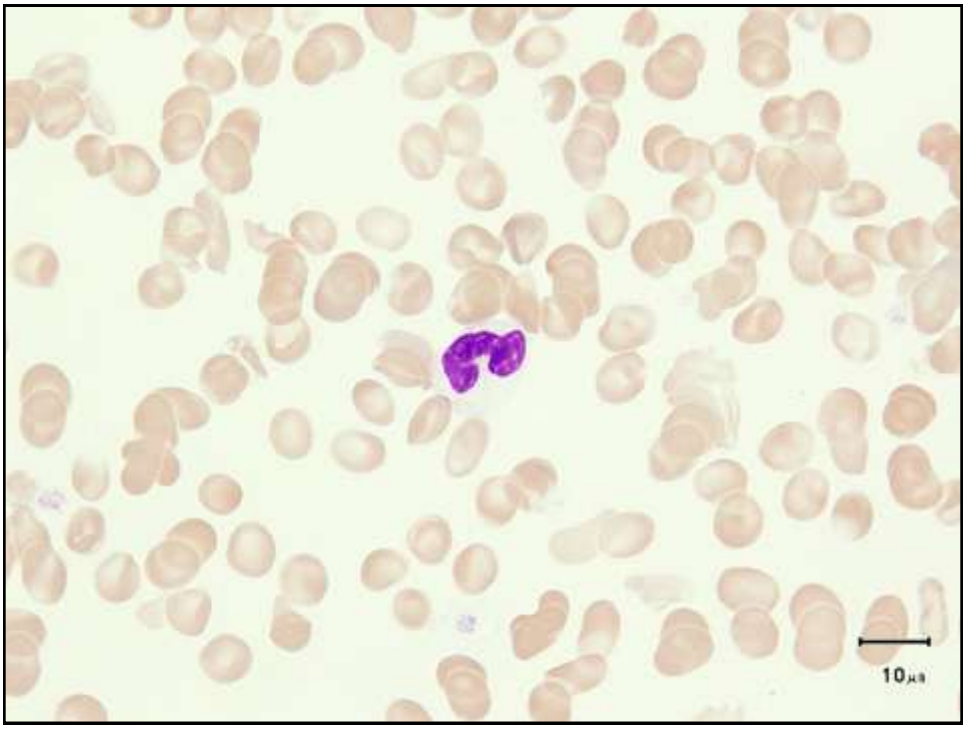
b. Bone Marrow

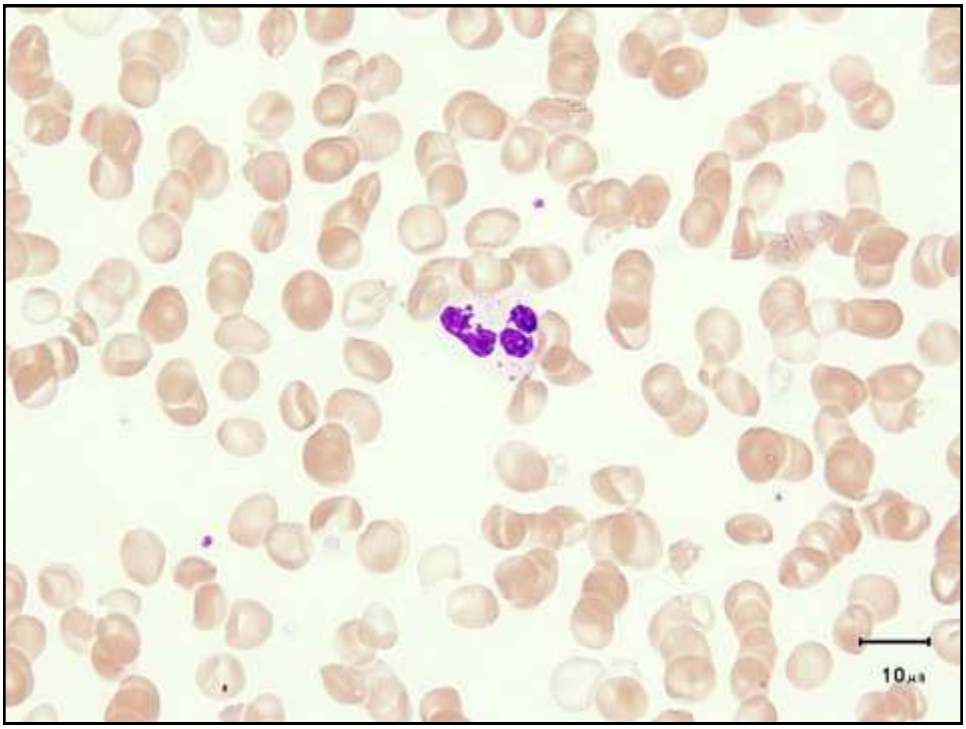
NCC ?, hypocellular BM.
M/E=1.2
Myeloblast 1.1%

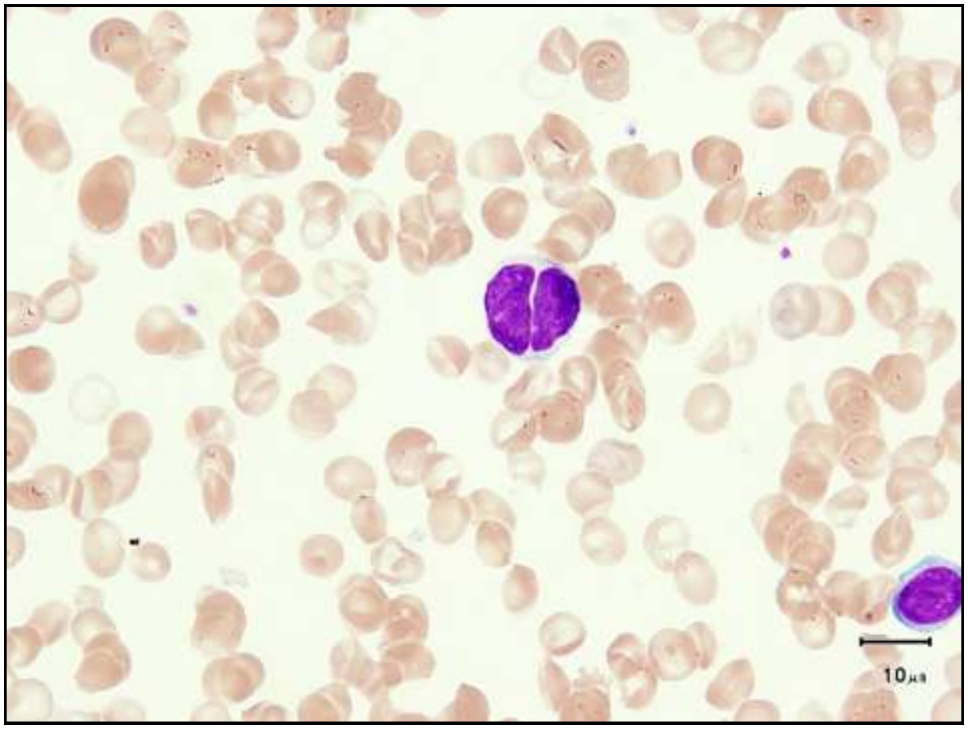
Chromosome testing

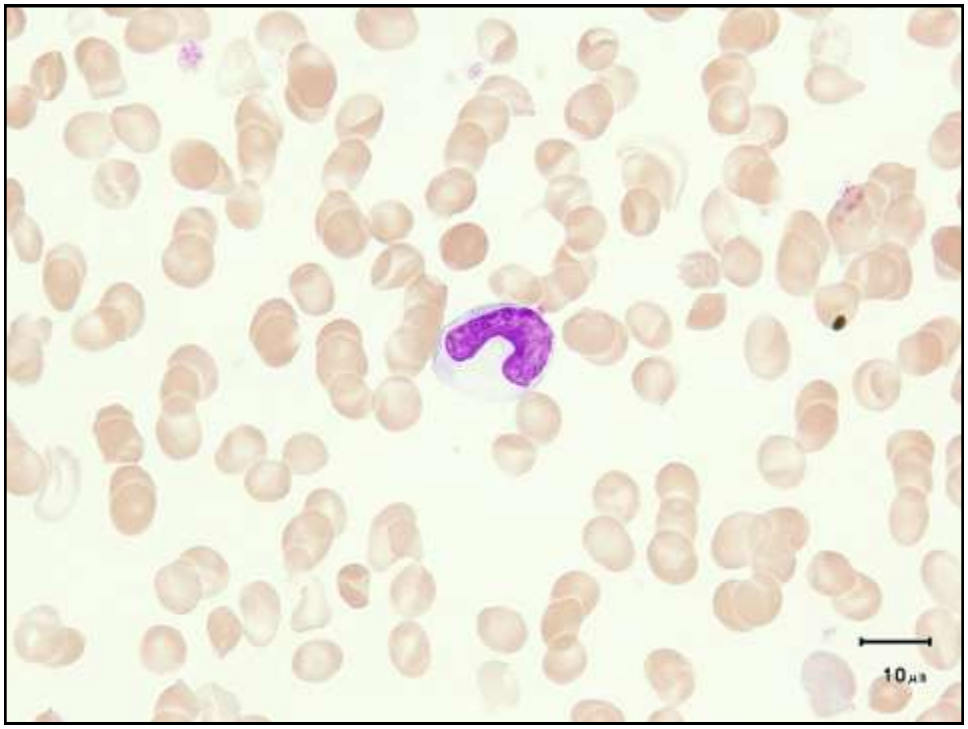
1. **44,XY,dic(5;17)(q11.2;p11.2),-7,add(18)(q21.1)[6/20]**
2. **45,XY,dic(5;17)(q11.2;p11.2), +8,add(11)(q13),-12,add(18)(q21.1), +mar[11/20]**
3. **44,XY,-3,dic(5;17)(q11.2:p11.2),-7,add(18)(q21.1),der(19)t(3;19)(q21;p13.3),+mar[2/20]**
4. **45,XY,der(3)del(3)(p21)add(3)(q27),dic(5;17)(q11.2;p11.2),-7,add(18)(q21.1)+mar[1/20]**




10μm


10μm


10μm


10μm

Diagnosis based on the WHO Classification 2008

dysplasia in 3 lineages + ring sideroblasts

< 5% myeloblasts

"RCMD"

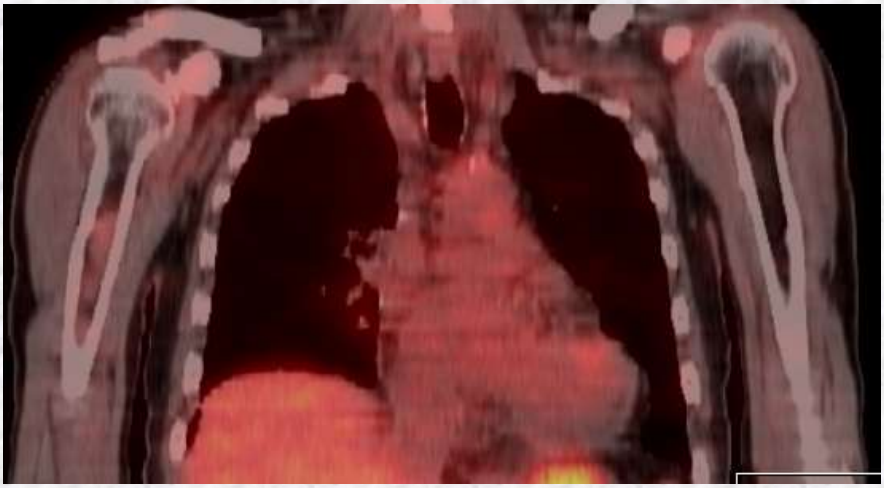
IPSS

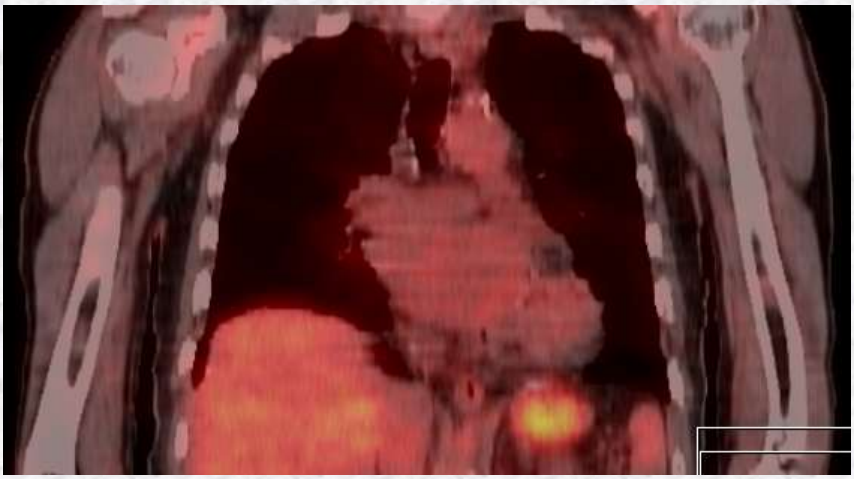
prognostic variable	0	0.5	1	1.5	2
marrow blasts(%)	< 5	5～10		11～20	21～30
Karyotype	good	intermediate	poor		
cytopenia	0～1	2～3			

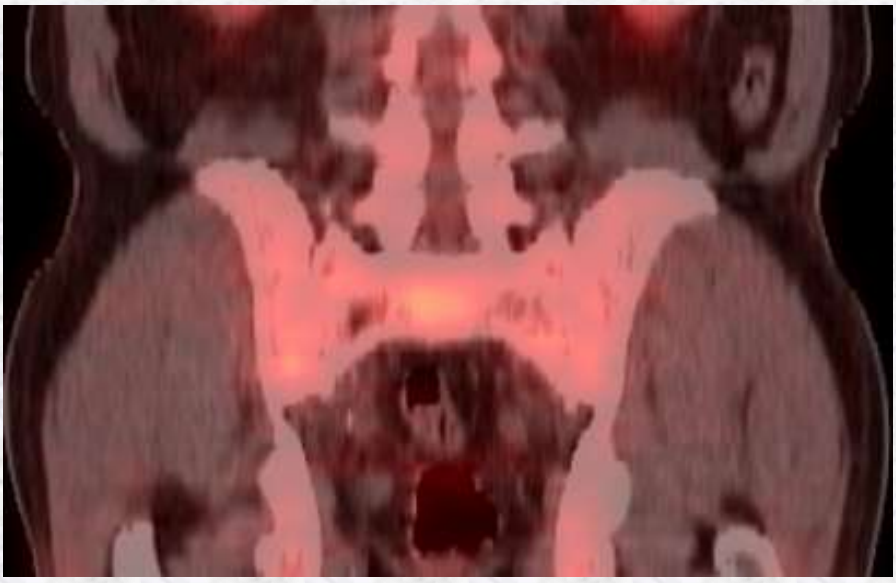
Overall score=1.5

Risk category	Overall s.
LOW	0
INT-1	0.5～1.0
INT-2	1.5～2
HIGH	≧2.5

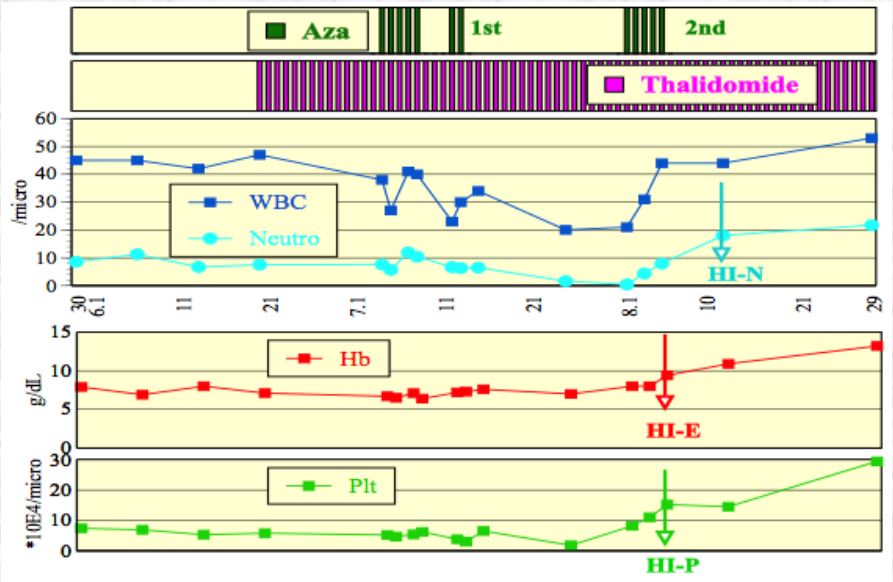
2011.6.18 PET-CT
before the treatment



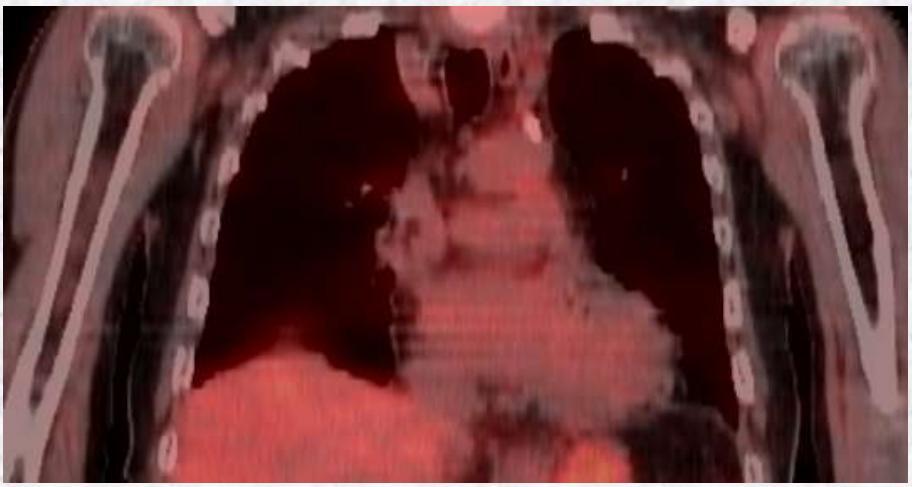




The clinical course



2011.10.6 PET-CT
after the hematological improvement



Summary

1. **The uptake of FDG in the bone marrow is not diffuse but there are some localized hot lesions in MDS.**

2. **The hematological improvement was achieved shortly after the Azacitidine therapy combined with thalidomide.**

3. **The uptake of the localized hot lesions became much weaker after the hematological improvement.**

Questions

1. **What is the pathological meaning of the localized uptakes ?**

   Is it general phenomenon in MDS ?

2. **What PET-CT becomes in the progressive phase?**