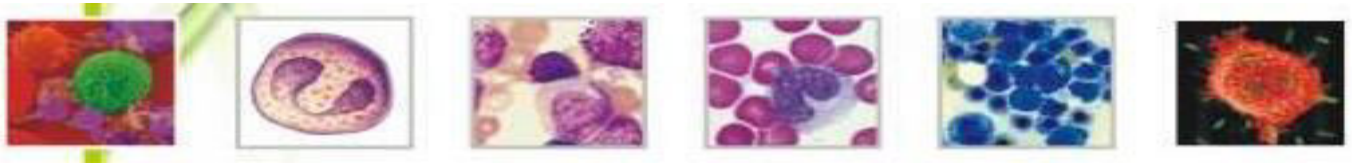


HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Dialogue between Clinician and Pathologist on CBC report

Dr. Seema Bhatwadekar

Haematologist, Oncohaematologist &
Transplant Physician
Vadodara.

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

CBC PBS

Most important test to make probable diagnosis

Crucial role to decide further work up

- Infection
- Haematolgical Malignancy
- Chronic inflammation, Auto immune
- Haemoglobinopathy
- Lead Poisoning

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

CBC PBS

No Further work up

- Nutritional anemia
- Pseudothrombocytopenia
- Certain acute leukemia

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Value addition by Pathologist

- Input on PBS morphology
- Interaction with clinician

Treatment and outcome of patient

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

CBC report

Call from clinical assisstant

- 28yr old female
- Primipara
- Post LSCS

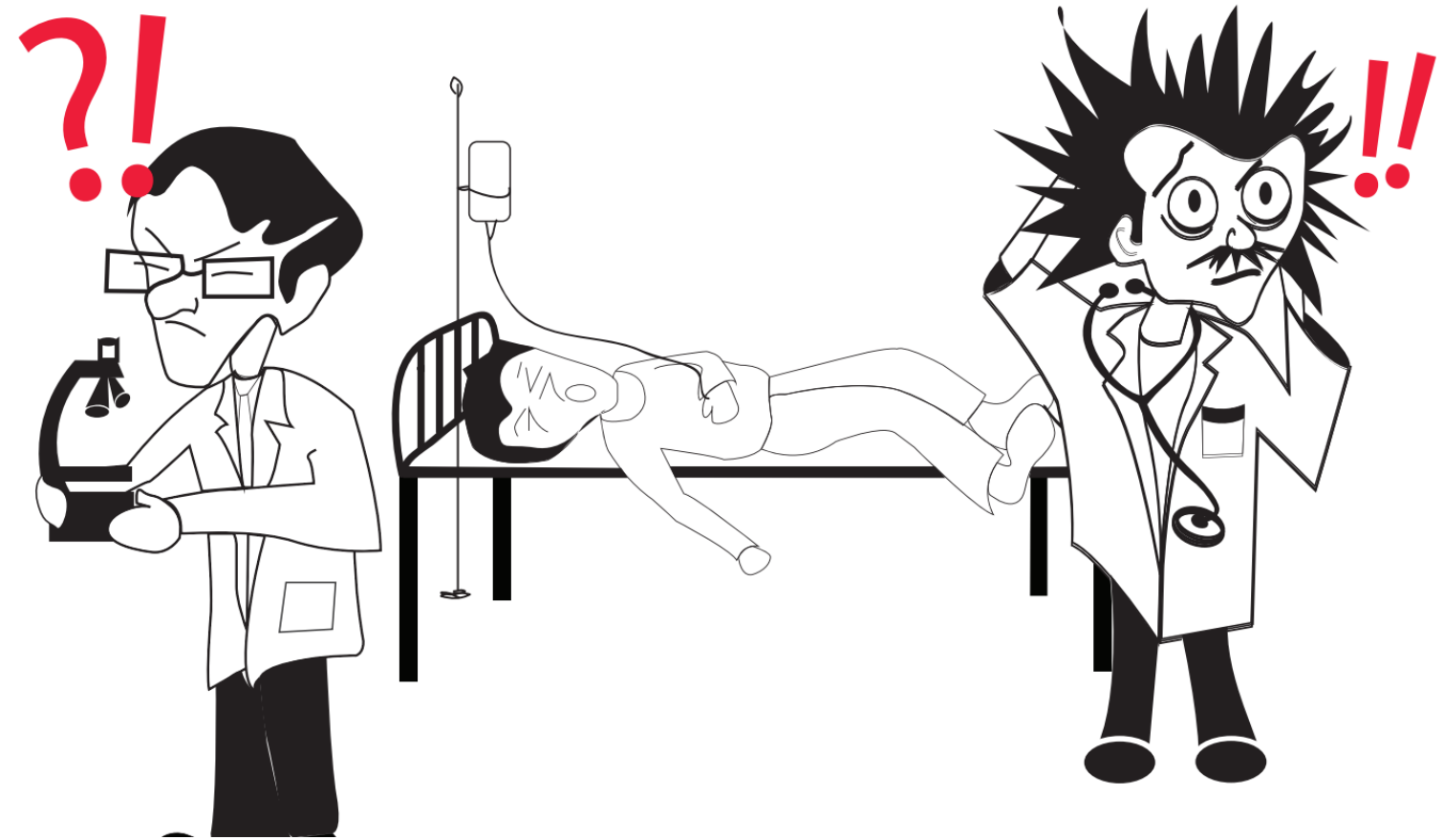
SMS by lab technician

- HB 6gm%
- TLC 16200/cumm
- PLT 15000/cumm

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Treatment given

- PCV/Fresh whole blood
- PRP/PC/SDP
- Broad spectrum antibiotic



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Scenario 1

6/16200/15000

PBS

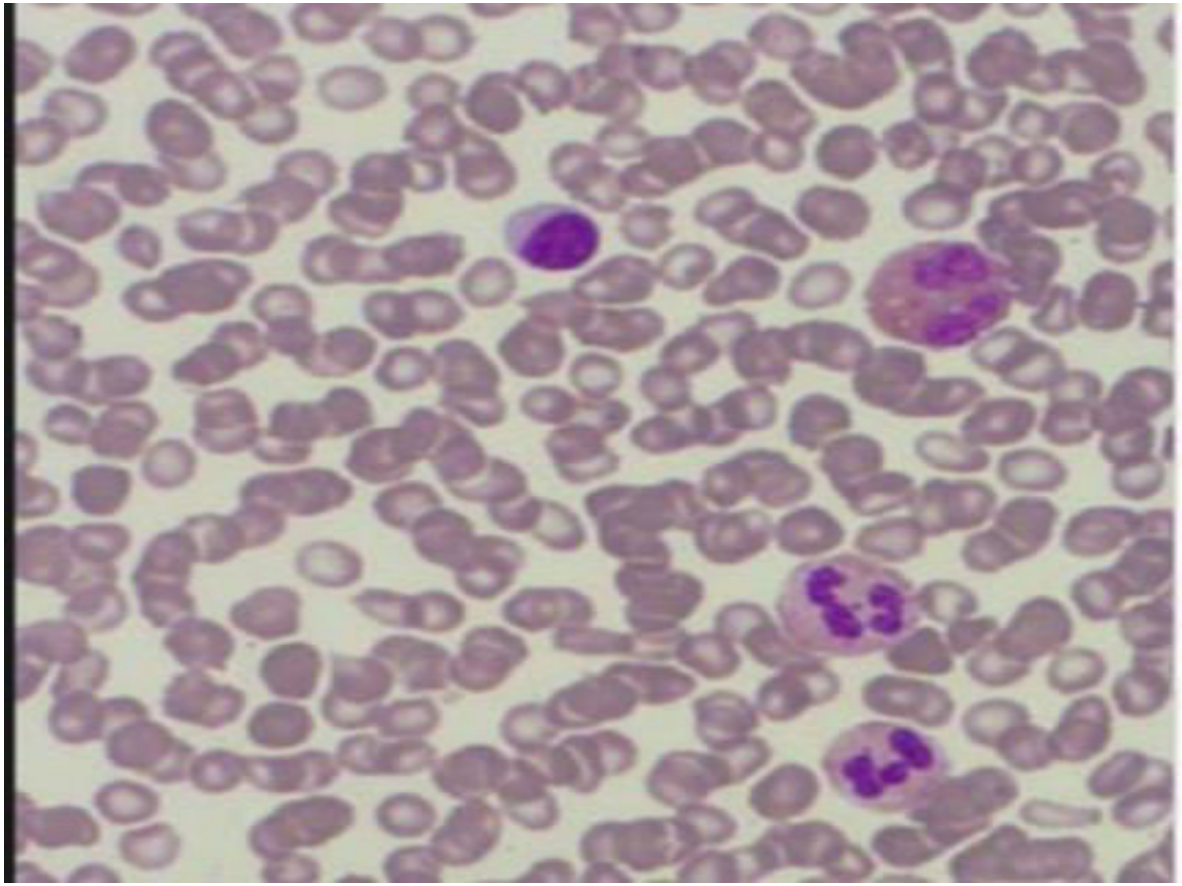
Microcytic hypochromic RBC

Leucocytosis ,neutrophilia no toxic changes.

No blast

PLT count approx 20000/cmm ,presence of giant plateletes

Thrombocytopenia with blood loss anemia



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

? ITP

PT,PTT,LFT.Creatinine,

PS for MP, Dengue HIV,HBsAG,HCV,ANA

Bone Marrow

USG Abdomen,CXR,

Diagnosis is made by exclusion.

1 in 1000 present with life threatning bleed.

85 % patients will respond to Steroids

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

ITP (Change in treatment plan)

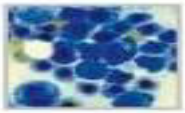
- Steroids
- IVIG
- Anti D
- Iron suppliments

- PLT count of neonate at day 1 and 4

How I treat thrombocytopenia in pregnancy
Terry Gernsheimer1,*, Andra H. James2,*, and Roberto
January 3, 2013; Blood: 121 (1)








HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Scenario 2

6/16200/15000

PBS

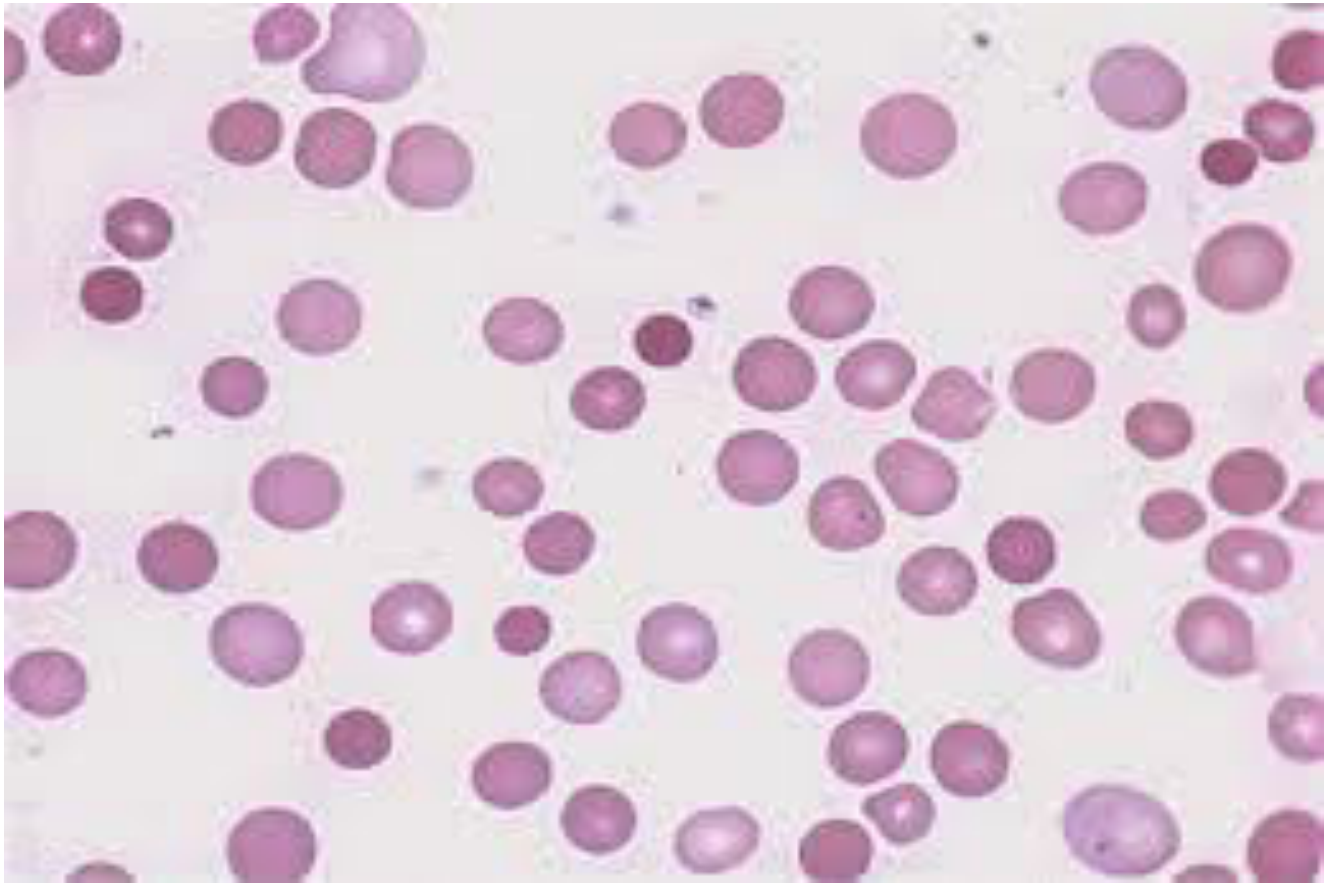
Macrocytic RBC,Many Microsperocytes,No schistocytes

Polychromasia

Leucocytosis ,neutrophilia no toxic changes

PLT count approx 10000/cmm

Thrombocytopenia with Haemolysis



? Evans Syndrome

DCT

PT,PTT,LFT.Creatinine,

PS for MP, Dengue HIV,HBsAG,HCV,ANA

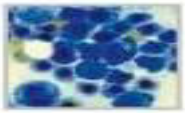
USG Abdomen,CXR

Auto immune activity against RBCs and Platelets

Needs aggressive immunosuppression








HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Evans Syndrome
Change in treatment plan

- Steroids
- Rituximab
- Splenectomy
- High dose Cyclophosphamide
- Danazol
- Mycophenolate mofetil

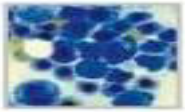
B12 and Folic acid supplementation

PLT count of neonate at day 1 and day 4

How I treat autoimmune hemolytic anemias in adults
Klaus Lechner1 and Ulrich Jäger
September 16, 2010; Blood: 116 (11)








HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Scenario 3

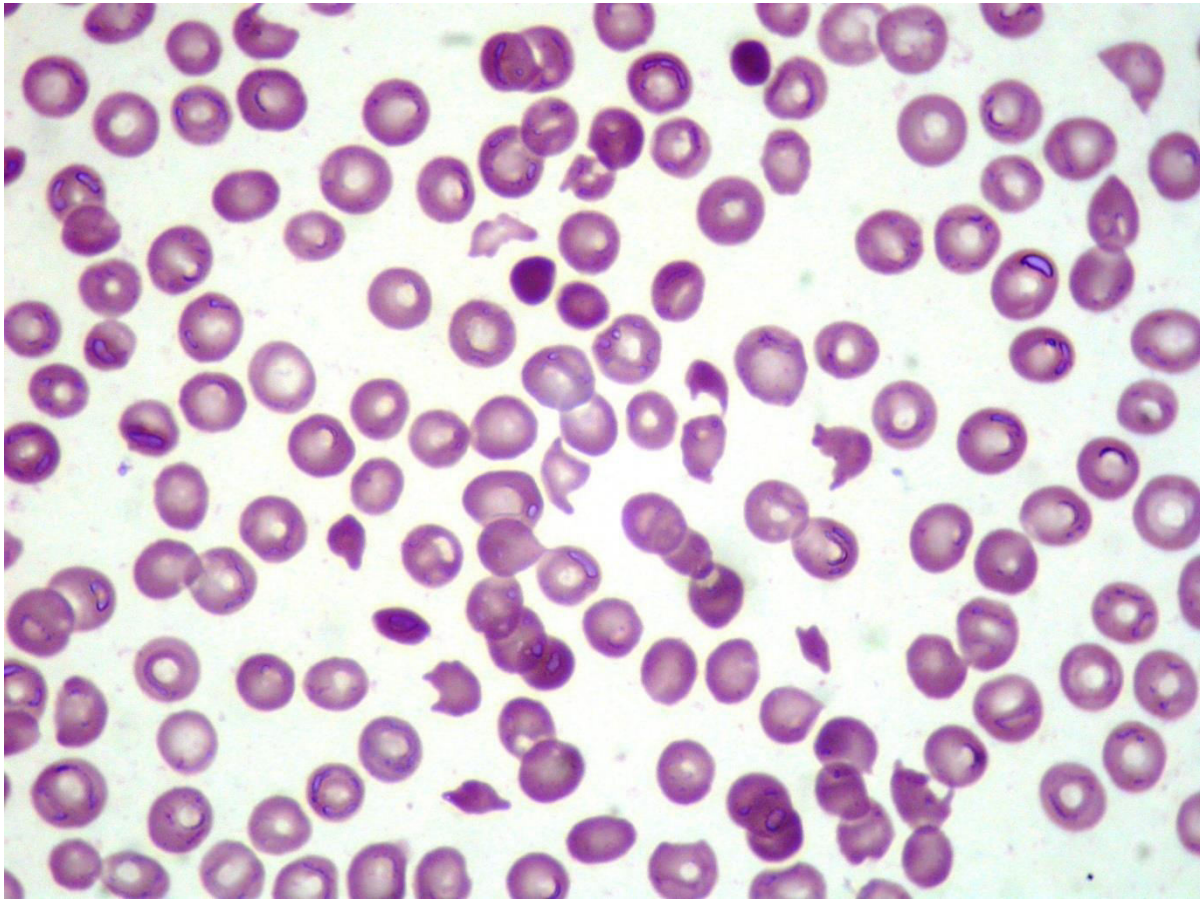
6/16200/15000

PBS

Normocytic normochromic RBC,More than 2 to 3 Schistocytes per oil field

Leucocytosis ,neutrophilia no toxic changes

PLT count less than 5000/cumm



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

?Postpartum Thrombotic Thrombocytopenic Purpua

LDH

PT,PTT,LFT.Creatinine,

PS for MP, Dengue HIV,HBsAG,HCV,ANA

USG Abdomen,CXR

Platelet transfusion is contraindicated

If left untreated more than 90% mortality

Needs urgent intervention

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

TTP (Change in treatment plan)

- Plasma exchange
- Steroids
- Rituximab

Thrombotic thrombocytopenic purpura and pregnancy: presentation, management, subsequent pregnancy outcomes
Marie Scully1, Mari Thomas2, Mary Underwood
July 10, 2014; Blood: 124 (2)

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Scenario 4

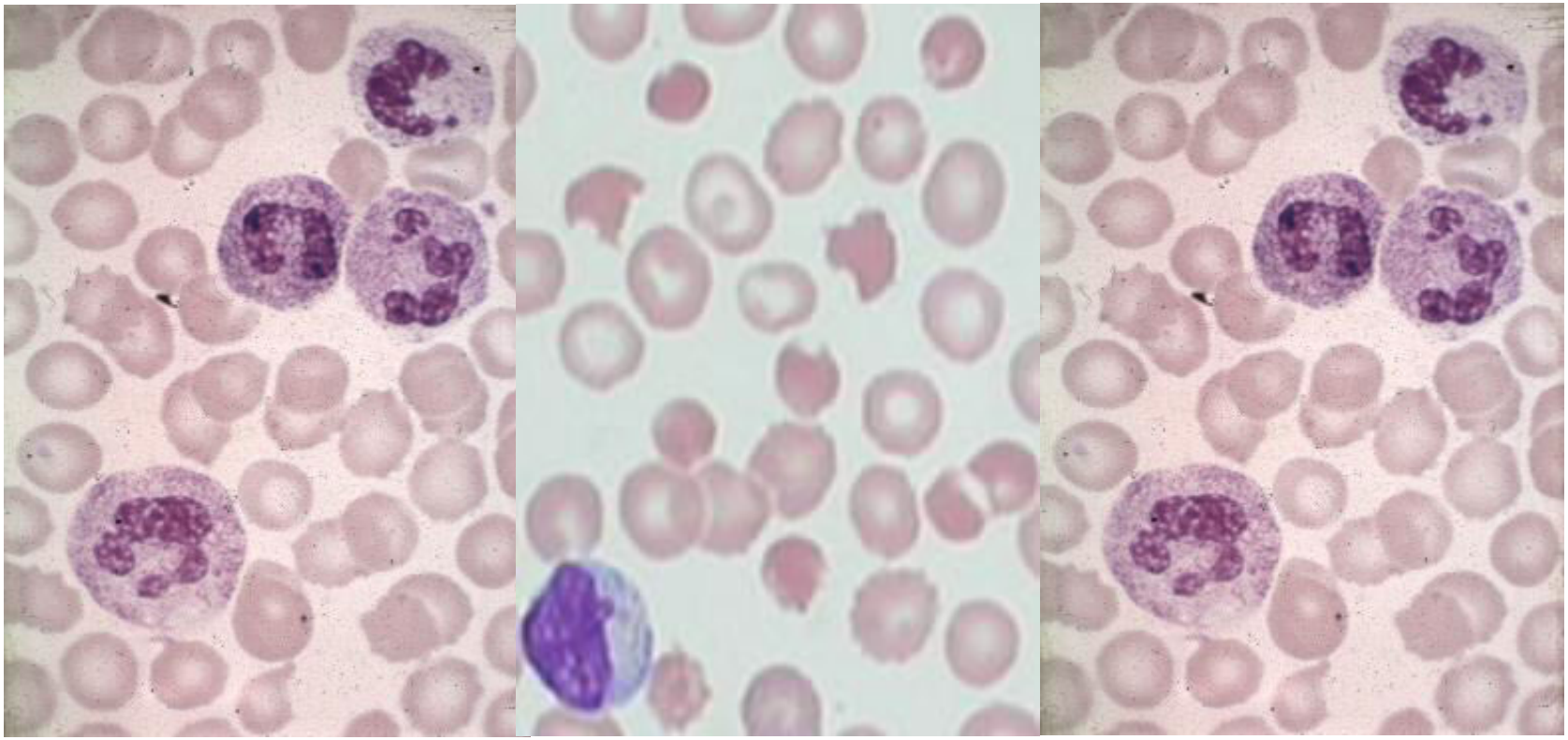
6/16200/15000

PBS

Anisopoikilocytosis,Many schistocytes

Leucocytosis ,neutrophilia ,toxic changes

PLT count approx 10000/cmm ,presence of giant plateletes



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

?Postpartum Sepicemia with DIC

PT,PTT, Fibrinogen,
LFT.Creatinine,
PS for MP, Dengue HIV,HBsAG,HCV
Blood and Urine cuture

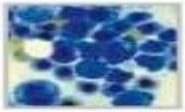
USG Abdomen,CXR,

Evaluation to find out root cause

Success rate is high.








HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Septicemia with DIC
Change in treatment plan

- Shift patient to Institute
- Involve team
- FFP,Cryo,PCV
- Antibiotics
- Treatment for underlying cause of septicemia

Erez O, Mastrolia SA, Thachil J. Disseminated intravascular coagulation in pregnancy: insights in pathophysiology, diagnosis and management. Am J Obstet Gynecol 2015; 213:452.






HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Scenario 5

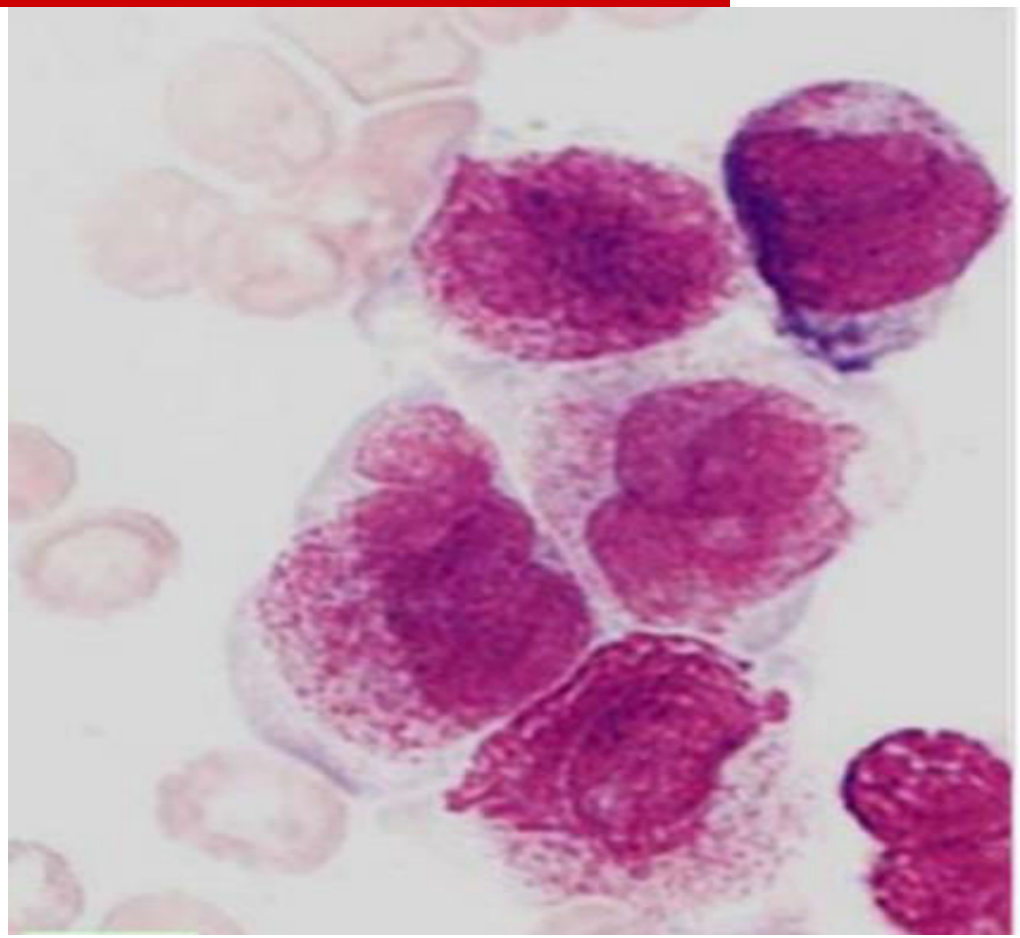
6/16200/15000

PBS

Microcytic hypochromic,macro ovulocytic RBC,Many Schistocytes

Leucocytosis ,Presence of abnormal promyelocytes with granular cytoplasm and aur rods

PLT count approx 5000/cmm



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Acute Promyelocytic Leukemia

Bone Marrow,CD Marker for acute leukemia,RT PCR for PML RARA,Cytogenetics

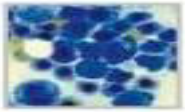
PT,PTT,LFT.Creatinine,

PS for MP, Dengue HIV,HBsAG,HCV,ANA

USG Abdomen,CXR,





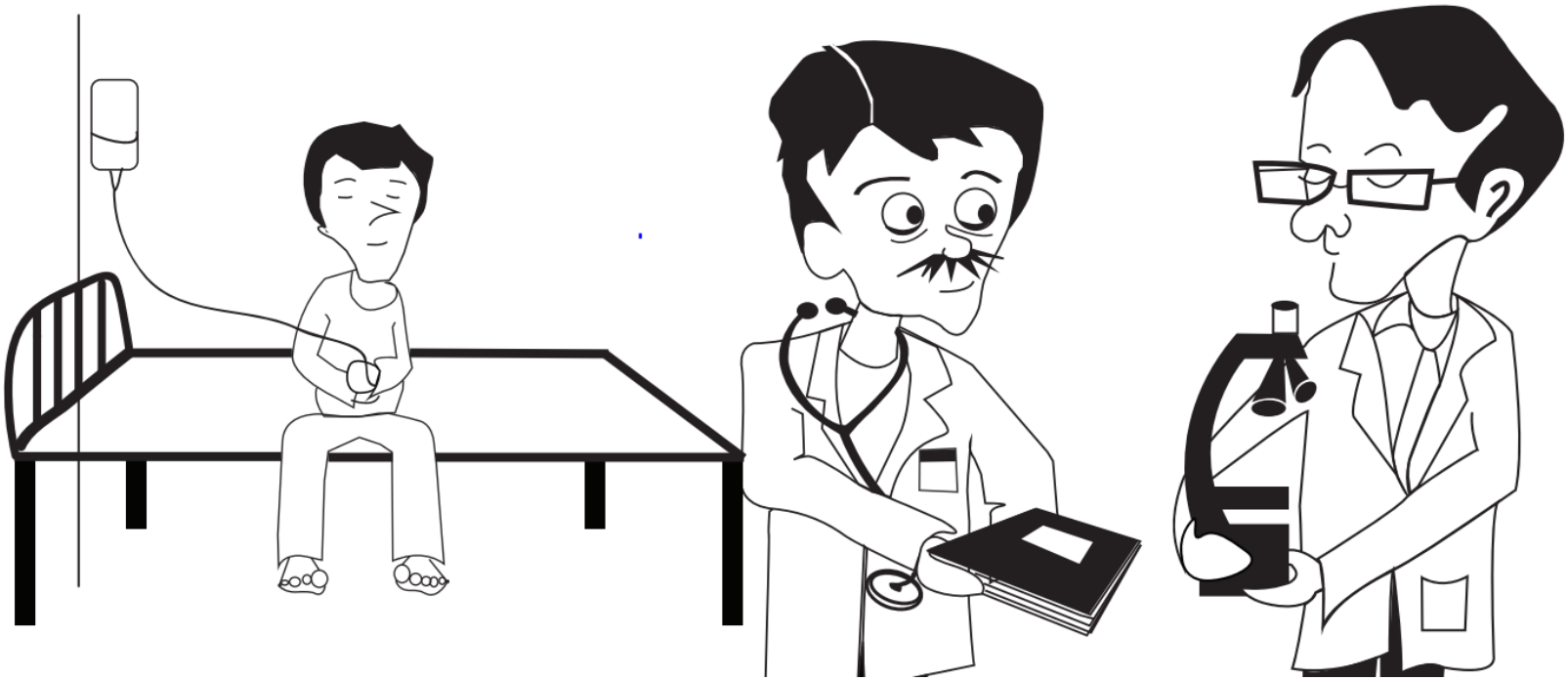



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

APML (Change in treatment plan)

- Shift patient to Institute
- Involve Haemato-Oncology team
- FFP,Cryo
- Antibiotics
- Arsenox/ATRA
- Chemotherapy
- High cure rate

How I treat acute promyelocytic leukemia
Martin S. Tallman[1] **and**
Jessica K. Altman[1]December 10, 2009; Blood: 114 (25)



HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

Dialogue

- Helps in saving life
- Decreases financial burden
- Whenever in doubt ask Colleague/Haematologist

HAEMOCARE CENTRE
Centre for Diagnosis & Treatment Counseling

ACKNOWLEDGEMENTS

- Dr. Shashi Apte,SSH Pune
- Sterling Hospital ,Vadodara
- Lab core Laboratory
- Haemocare Staff
- Shrinivas Amita Advait

HAEMOCARE CENTRE

Centre for Diagnosis & Treatment Counseling

THANK YOU