- Lecturer: Dr. Tariq Al-Adaily
- Email: <u>TNALADILY@ju.edu.jo</u>
- Office: JUH- outpatient building
- 3<sup>rd</sup> floor, Hematology Lab
- Office hours: Thursday 12-1
- Reference: Robbins Basic Pathology 9<sup>th</sup> ed

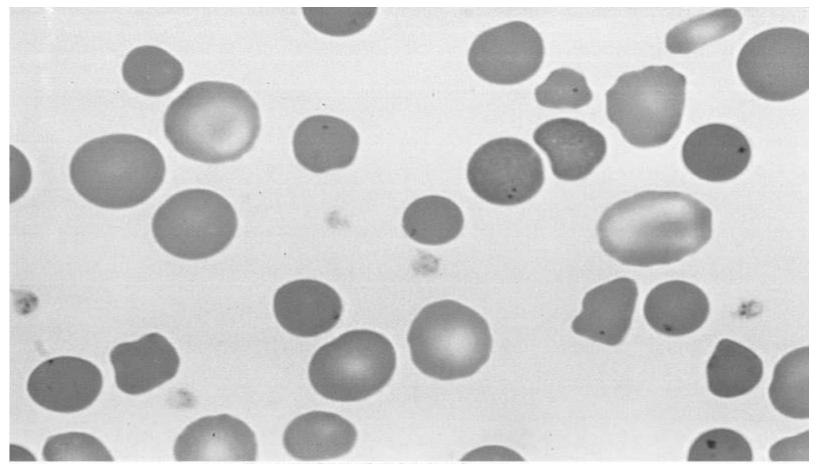


A-LAB 0004

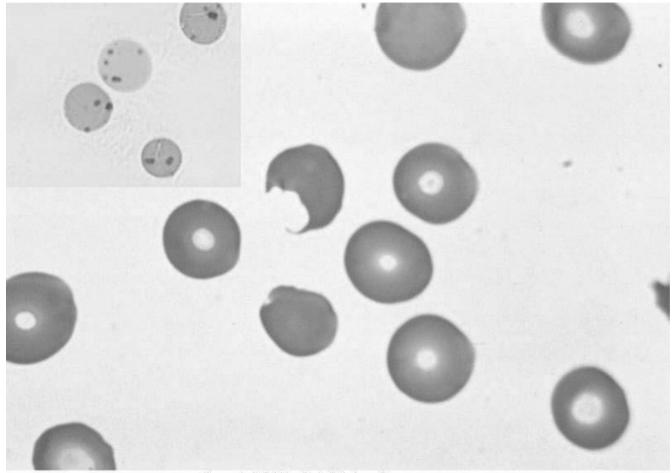
## Lab. Request Form



ASSISTERS	A-LAD	0004							Freetile (diffe.	FLICTING I	550 J
Surname: Forname: Sex: Date of Birth: Hospital No.: Ward / Clinic: Consultant: Address:		R R C	Lab. Ref. No.:  Rec. Date:  Rec. Hr.:  Charges J. D. Fils		Da	Nature of Specimen / s  Date  Hr  Dr. Sig.					
Code No.		Result			Ġ.		Result				
CBC103001	103005	0	WBC $\times$ 12 <sup>12</sup> /L		4.0 - 10	102012	DIL	Disates abases in		6	
			RBC × 109/L		M 5.5 ± 1.0	103012	☐ Hb. Electrophoresis			-17 5	
	103004			F 4.8 ± 1.0	8:	١L	Neut - Band %		0	10	
		103003	Hemoglobin g/dl		M 16 ± 2	= 15	DIFFERENTIAL	Neut - Sig. %		40 - 75	
	103003				F 14 ± 2			Eosinophil %		1 - 6	
	103003	нст		$M 0.46 \pm 0.05$	103008	DIFFE	Basophil %		0 - 1	>	
				F 0.42 ± 0.05			Lymphocyte %	01	20 - 45	C	
			MCV fl		80 - 100	1	0.	Monocyte %	200	2 - 10	0
			MCH pg / cell		26 - 34			Wondeyte 20	24	2-10	100
		ū	MCHC g / dl		31 - 36	LAB COMM	ENTS				
103006 □ Platelet × 10 <sup>9</sup> /L			140 - 440						0		
103011 🗆 ESR mm / hr			M 0 - 15 F 0 - 20	CONTROL VALUE DE LA CASA DEL CASA DE LA CASA DEL CASA DE LA CASA D				And the second s	100		
103010 □ Retic. Count			0.005 - 0.015						W		
103009 ☐ Eosin. Count t × 10 <sup>9</sup> /L			0.05 - 0.45								
103020 ☐ Sickle Cell			Nil					40			
103007		To the pl							1		
103025										- 55	
103031 □ РТ											
103032 □ PTT											
103033 □ EGT					Date Reported Reported By						
	1000		Mile-19-00								

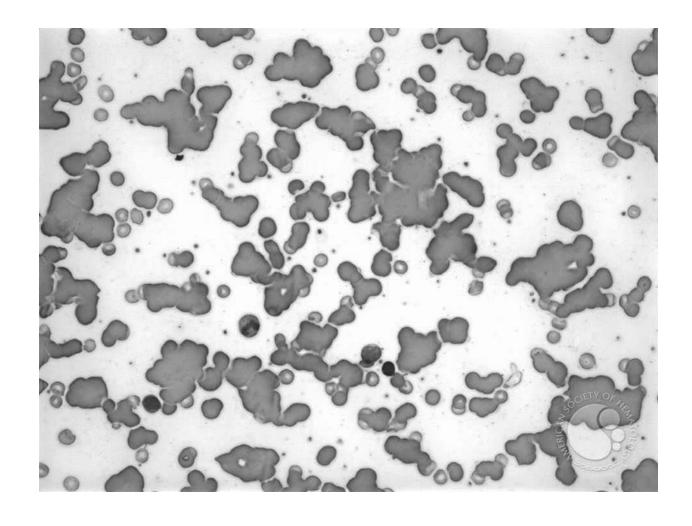


\* Spherocytes appear as small, round cells without the central pallor. Howell Jolly bodies are noted

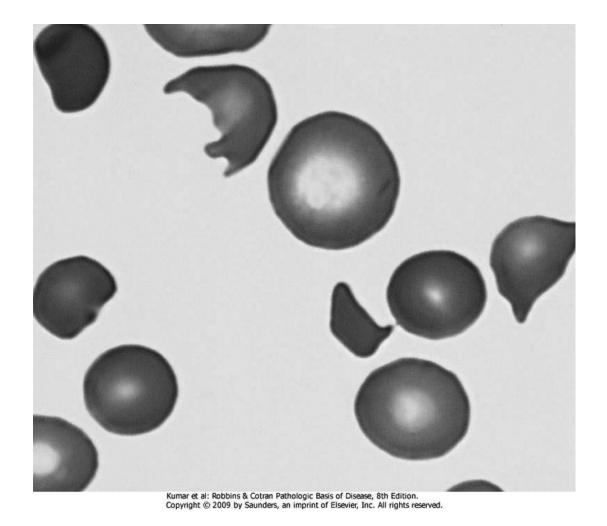


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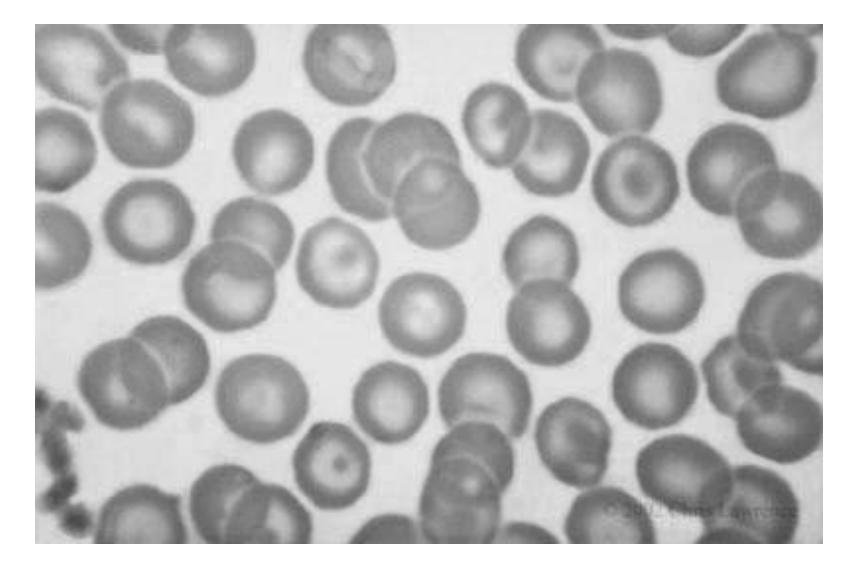
 Bite cells: seen in G6PD deficiency. Supravital stain (crystal violet) highlights Heins bodies



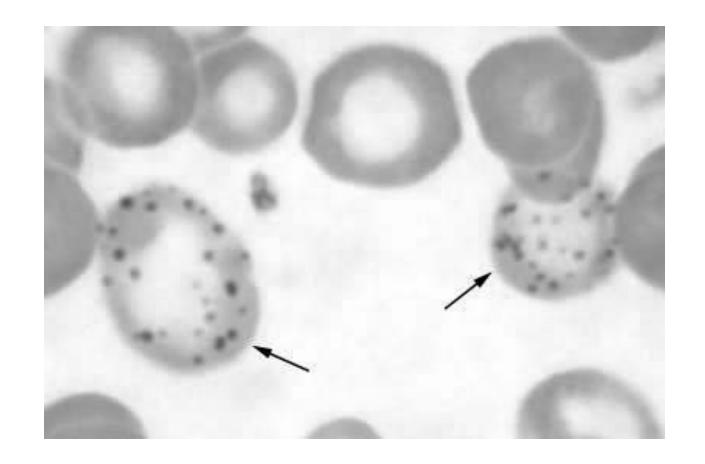
• RBC agglutination in autoimmune hemolytic anemia



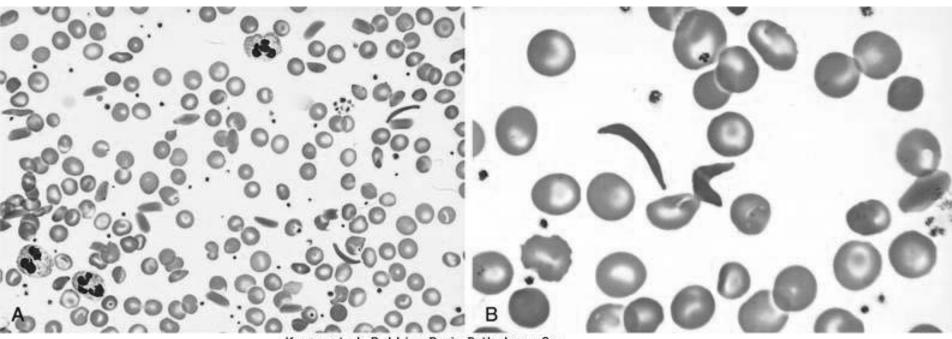
Schistocytes: fragmented RBCs seen of different shapes



 Monomorphic hypochromic microcytic anemia with target cells, seen in thalassemia

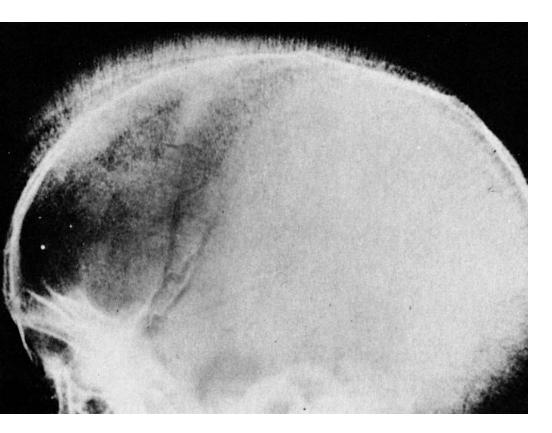


 Basophilic stippling: aggregates of ribosomes, appear as fine blue inclusions in RBCs



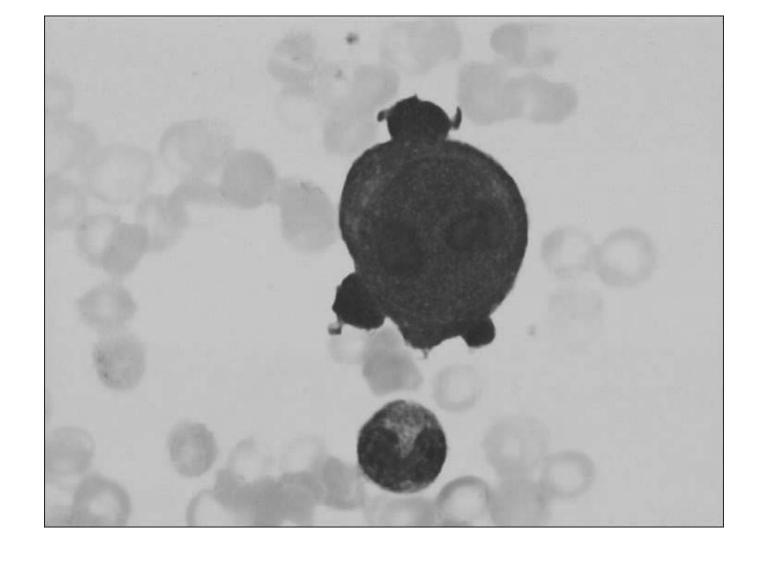
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Sickle cell anemia: numerous sickle cells and target cells

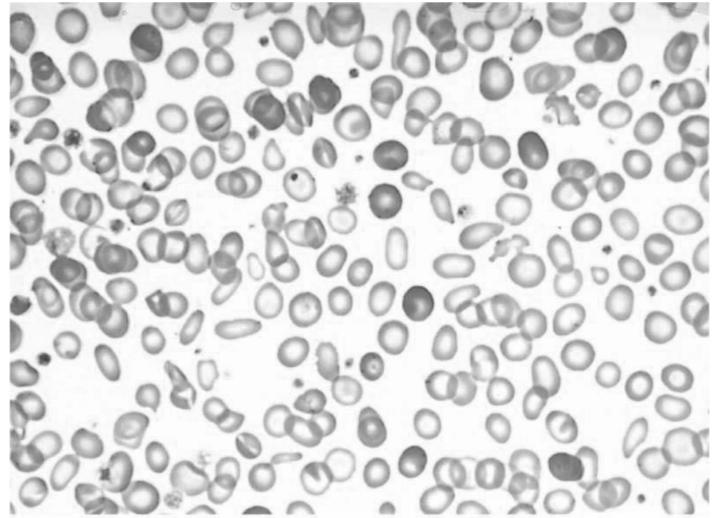




 Crew-cut appearance of skull of X ray: secondary to marked erythropoiesis in sickle cell anemia and B-thal

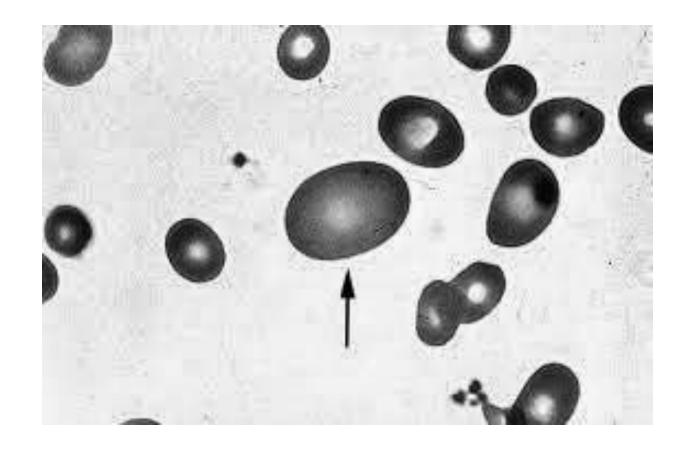


Aplastic crisis: pronormoblast shows nuclear inclusions

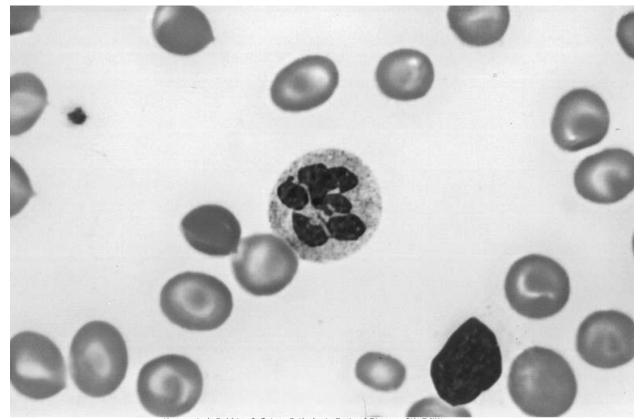


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 Iron deficiency anemia: hypochromic mircocytic RBCs, poikelocytosis, target cells

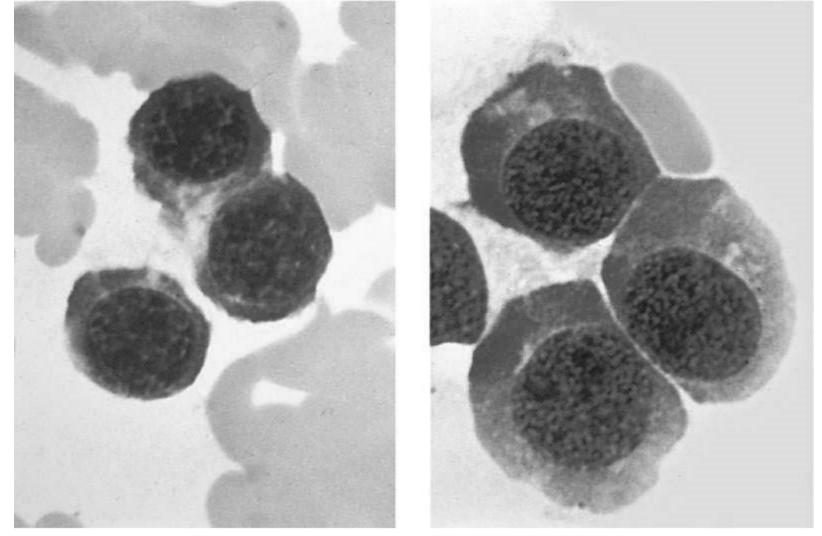


• PB: large ovalocyte is specific for megaloblastic anemia



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Megaloblastic anemia: hypersegmented neutrophil

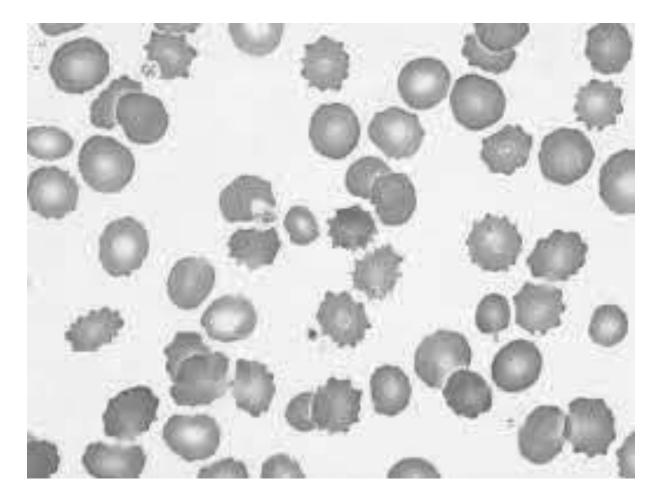


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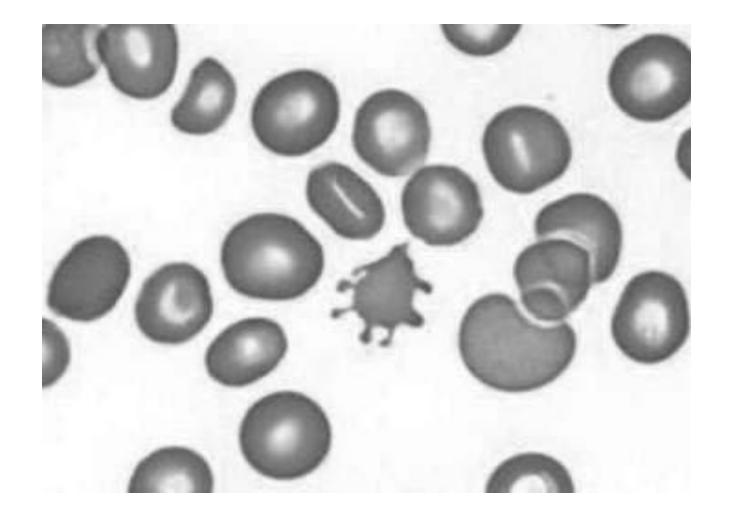
Comparison of normoblasts (*left*) and megaloblasts (*right*). The
megaloblasts are larger, have relatively immature nuclei with finely
reticulated chromatin, and have an abundant basophilic cytoplasm



 Aplastic anemia: bone marrow is composed of adipose tissue with very scarce hematopoietic cells



• Echinocytes: circumferential small cytoplasmic projections, seen in uremia



• Acanthocyte: long membrane projections