

Myelodysplastic syndromes: Characteristics of patients presented at very old age

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Myelodysplastic syndrome (MDS)

- ineffective haematopoiesis
- Over 70% occur in aged over 60
- Est. new patients in Hong Kong:
 - 2004: 100-500 cases per year,
 - 2033: 500-2000 cases per year

FAB Classification

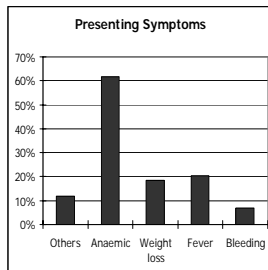
- Refractory Anaemia (RA),
- Refractory Anaemia with Ring Sideroblasts (RARS),
- Refractory Anaemia with Excess of Blast (RAEB),
- Refractory Anaemia with Excess of Blast in transformation (RAEB-T) and
- Chronic Myelomonocytic Leukaemia (CMML)

Method and Objective

- Retrospective study
 - Study period: 1997-2004
 - Inclusion: Patients with primary MDS
 - Exclusion: Patients with past history of MDS, chemo / radiotherapy
- Objective
 - Presentation
 - Prognosis
 - Characteristics of very old patients (>80 years)
 - Local characteristics
 - Clinical scoring systems for prognosis (Sanz score, Bournemouth score)

Presentation

- 66 patients:
M:F=58%:42%
- Median age: 73 (36-90),
- 16 (24%) patients aged >80



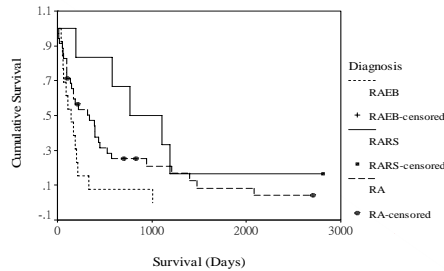
Investigations

- Peripheral blood:
 - WCC: $4.6 \times 10^9/l$
 - Neutrophil: $2.1 \times 10^9/l$
 - Hb: 7 g/dl
 - Platelets: $91 \times 10^9/l$
- BM blast:
 - <5%: 77%
 - >5%: 23%
- Cytopaenia
 - Monocyto: 39%
 - Bicyto.: 30%
 - Pancyto: 30%
- Diagnosis:
 - RA: 64%
 - RARS: 11%
 - RAEB: 20%
 - RAEB-T: 3%
 - CMML: 3%

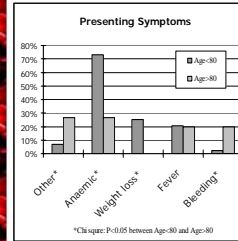
Survival according to FAB class

Figure 2: Survival according to FAB classification*

*survival for RAEB-T: 35 days (n=1), survival for CMML: 15 days (n=1)



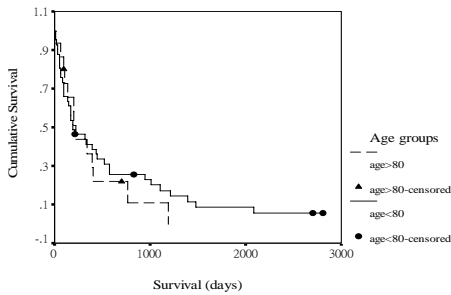
Elderly patients



- More elderly with:
 - Other presentation
 - Bleeding
- Less elderly with:
 - Anaemic symptom
 - Weight loss

Survival according to age group

Figure 3. Survival according to age group



Local characteristics-I

	KWH	Historic data*
Male	58%	40-56%
Age(yr)	73	61->70
Hb(g/dl)	7	7-10
Bicytopenia	30%	27%
Pancytopenia	30%	14-27%
BMblast < 5%	77%	55-59%

*Graham, 2002; Greenberg, 1997; Aul, 1992; Sanz, 1989; Foucar, 1985

Local characteristics-II

	KWH	Historic data*
Diagnosis		
RA	64%	12%-41%
RARS	11%	14%-20%
RAEB	20%	19%-26%
RAEB-T	3%	7%-15%
CMML	3%	8%-19%
Median Survival (days)		
RA	336	780-1920
RARS	769	630-2130
RAEB	141	210-1020
RAEB-T	35	120-150
CMML	15	240-570

Prognostic predictors

- Sanz score
 - BM blast score
 - Platelet score
 - Age score
- Bournemouth scoring system
 - BM score
 - Hb score
 - Neutrophil score
 - Platelet score
- Sanz's Risk group:
 - Low risk: 39 mth
 - Intermediate: 20 mth
 - High risk: 5 mth
- Risk group:
 - Group A: 34mth
 - Group B: 14 mth
 - Group C: 4 mth

Survival: Prognostic predictors

	% of patients	Survival (days)	p value
Sanz Score			
Low risk	46%	434	0.0271
Interm. risk	40%	202	
High risk	14%	88	
Bournemouth scoring system			
Group A	32%	943	0.0081
Group B	58%	187	
Group C	11%	88	

Discussion-Elderly patient

- Elderly reported less symptom
 - Presence of other co-morbidities
 - Self neglect
 - Communication barrier
- Survival of elderly was similar to young patients
 - ?young patients has more co-morbidity
 - ?young patients presents later

Discussion-Local characteristics

- Lower haemoglobin level
 - Delay for seeking medical attention
 - Delay in performing BM biopsy
- More patients with bicytopenaemia and pancytopenia
 - ?late presentation of our patients

Discussion

- Shorter survival
 - Advanced age
 - More bilineage and multilineage involvement in RA
- Sanz score and Bournemouth scoring system can successfully predict prognoses

Thank You!