

Non dilated cardiomyopathy



Institute of cardiology

Madras medical college. Chennai

Cardiomyopathy

Classified as dilated, hypertrophic and restrictive by WHO and world heart federation.

“It has been observed a distinct group of patients who show global contractile LV dysfunction without any evidence for either dilatation, hypertrophy or restriction of myocardium”

We report the retrospective data from our institute's cardiomyopathy registry between 1999-2002.

Patients with global hypokinesia and ejection fraction less than 50% constituted the study group.

Patients with LV dilatation (Diastolic >56mm) , asymmetric LVH and restrictive myocardium were excluded

Mean age was 46(Range 26-58)

Male female ratio 2.5:1.14

(40%) Patients presented with symptoms of cardiac failure and rest were asymptomatic.

Diabetic patients constituted 18%(6/34).

Clinical presentation(no:34)

Idiopathic	11
Hypertension	4
Ischemic	3
Chronic renal failure	3
Pregnancy	6
Misc	
Drug induced	2
Scorpion sting	2

Patients with cardiac failure were managed with digoxin, diuretic and ACE inhibitors.

3 patients required inotropic support.

The clinical and echocardiographic profile is summarized .

	Nos 30	Mean LVid	Mean LVsd	Mean & Range EF
Idiopathic	11	5.2	3.4	.48(.35-.50)
Hypertension	4	4.6	3.6	.48(.45-.50)
Ischemic	3	5.2	4.4	.40(.35-.50)
Chronic renal failure	6	4.4	3.5	.48(.42-.54)
Pregnancy PIH	2	4.8	3.4	.45
Mis				
Drug induced	2	3.8	2.9	.38
Scorpian sting	1	5.4	4.4	.35
		4.6	3.8	.35

One month follow up

1 Month follow up	LVid	LV sd	EF
Idiopathic	5.2	3.2	.50(.35-.55)
Hypertension	4.4	3.2	.52(.48-60)
Ischemic	5.6	4.0	.45(.30-55)
Chronic renal failure	4.6	3.5	.48(.42-.55)
Pregnancy PIH	5.8	4.4	.35/.55
Mis	4.2	2.6	.55
Drug induced	5.1	2.8	.65/.70
Scorpian sting	4.4	2.7	.60

There is generally progressive LV dilatation

Except in 2 patients with ischemic and one with PPH

The EF fraction improved during the follow up period by 8-10%

Limitations of the study

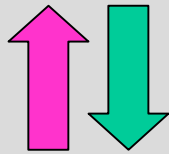
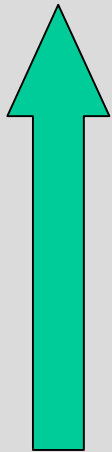
Baseline LV dimension not known

LV can dilate more than 50% and still within the normal range.

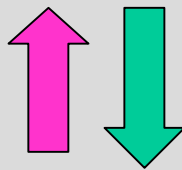
Follow up period short

Clinical significance not clear

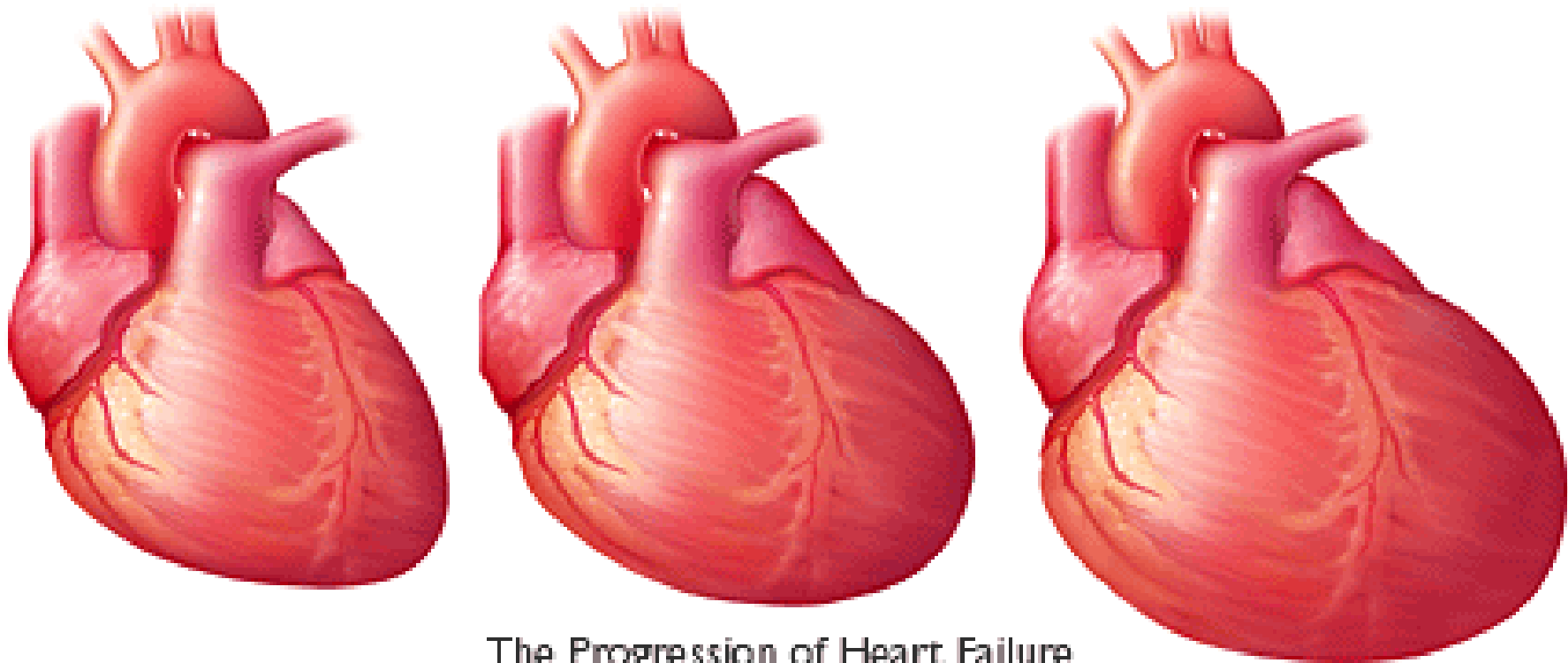
Dilated CM



Minimally dilated CM



Non dilated CM



The Progression of Heart Failure

Conclusion

Within the diagnostic criteria of WHO, there exist a distinct subgroup(9%) of cardiomyopathy with normal LV dimension and global hypokinesia.

The etiology is varied and the prognosis is excellent.

This clinical entity may be referred to as non dilated cardiomyopathy (NDCM)



The knowledge evolves . . .

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