

LETTER TO THE EDITOR

DICROTIC NOTCH IN FEMALES

Sir,

(Received on December 4, 1997)

Previously we have reported our results regarding dicrotic notch on pulse tracing and its relationship to anthropometric measurements in males. We extended our study to female sex and recorded the pulse in 90 female subjects (1).

Pulse was recorded on student physiograph from the proximal phalanx of the right-index finger in sitting posture after 15 min of physical rest. Height is recorded in cms without shoes, weight recorded in kgs on Avery weighing machine. The results revealed that only 43 tracing (47%) showed a dicrotic wave on the catacrotic limb of the pulse. The

relevant anthropometric data is presented in Table I.

On analysis following points were noted :

1. Incidence of dicrotism is less in females (47%) when compared to males (69%).
2. Dicrotism is more prevalent in young age groups and the correlation is much stronger in females.
3. Incidence of dicrotism is more with increasing heights. Correlation is less marked in females.
4. Weight is not correlated with dicrotism in both the sexes.

TABLE I

Sl. No.	Parameter	Without dicrotic (n=47)	With dicrotic (n=43)	Probability
1.	Age (years)	39.17 ± 14.28	23.14 ± 8.8	<.01
2.	Height (cms)	150.8 ± 8.82	155.3 ± 6.22	<.01
3.	Weight (kgs)	51.7 ± 10.6	49.6 ± 10.27	>.05
4.	BM 1 wt/Ht.2	22.7 ± 5.3	20.6 ± 4.3	>.05

For comparison we are representing in Table II, Similar data obtained in the previous study done on male subjects.

TABLE II

Sl. No.	Parameter	Without dicrotic (n=43)	With dicrotic (n=97)	Probability
1.	Age (years)	39.0 ± 16.55	25.51 ± 8.38	P <0.001
2.	Height (cms)	166.46 ± 5.08	171.93 ± 6.67	P <0.001
3.	Weight (kgs)	59.35 ± 13.75	61.94 ± 12.24	P >0.005
4.	BM 1 wt/Ht.2	21.31 ± 4.36	20.84 ± 3.76	P >0.05

5. BMI is not significantly related to dicrotism and this statement is more applicable to males.

We hypothesize that

1. Dicrotism is more in younger subjects and in males. This may reflect their lesser ejection time consequent to higher

heart rate. This also explains sex differences (2).

2. Dicrotism with higher height may be related to greater length of the arteries and their branching pattern (2).

3. Pulse pattern may be utilized for anticipating various circulating diseases and ageing phenomenon.

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Parameter	With dicrotism (n=17)	Without dicrotism (n=17)
Age (years)	23.12 ± 2.84	29.17 ± 4.28
Height (cm)	167.2 ± 7.92	170.7 ± 8.42
Weight (kg)	60.8 ± 10.21	62.1 ± 10.6
BMI (kg/m ²)	20.8 ± 2.3	20.7 ± 2.3

TABLE II

Parameter	With dicrotism (n=17)	Without dicrotism (n=17)
Age (years)	23.12 ± 2.84	29.17 ± 4.28
Height (cm)	167.2 ± 7.92	170.7 ± 8.42
Weight (kg)	60.8 ± 10.21	62.1 ± 10.6
BMI (kg/m ²)	20.8 ± 2.3	20.7 ± 2.3

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