

R E S U L T S

We examined 8878 pupils in Quisna Town , from 20 schools in primary and preparatory stages , out of them 35 pupils had rheumatic heart diseases and some cases with rheumatic activity . The prevalence of rheumatic fever and rheumatic heart disease has been found about 3.9 per thousand among school children aged 5 - 15 years (table - 1) .

The number of examined pupils in primary stage were 5406 at 14 schools , out of them 18 pupils had rheumatic heart disease. The prevalence of rheumatic diseases was about 0.33 per cent , while the number of examined pupils in the preparatory stage were 3472 at 6 schools, out of them 17 pupils had rheumatic heart disease. The prevalence of rheumatic heart diseases has been found to be about 0.48 per

cent . There was no significant difference between primary and preparatory stages as regard to rheumatic disease cases among school children aged (5 - 15) years (table 2.).

Fifty one per cent of the rheumatic heart disease cases were knowing the onset of rheumatic fever at the first attack . The majority of cases had the onset of rheumatic fever at the age of 7 - 12 years (table 3).

The number of examined males were , 4594 , out of them 20 pupils had rheumatic heart disease , the prevalence of rheumatic heart disease in males among school children was 57.1 per cent , while the number of examined females were 4284 , out of them 15 pupils had rheumatic heart disease. The prevalence of rheumatic heart disease was 42.9 % in females among school children aged 5 - 15 years . There was no significant sex difference between males

and females as regard to the number of rheumatic heart disease cases prevalence among school children (Table 4).

The number of active rheumatic hearts was four cases. The prevalence of rheumatic activity was 11.4 per cent, while the number of quiescent rheumatic heart was 31 cases. The prevalence was 88.6 per cent. (Table 5).

The majority of cases of rheumatic activity showed arthritis and carditis, (3 cases), while rheumatic chorea presented in one case only, with incidence of 25 per cent of active cases. Erythema marginatum and subcutaneous nodules were very rare. E.S.R. was elevated in all cases of arthritis and most cases of carditis. Carditis with low E.S.R. was present with congestive heart failure. A.S.O. was elevated in all cases of arthritis and carditis above 250 Tu units. C - reactive protein was positive in all cases of carditis and arthritis.

In the case of rheumatic chorea , there was no arthritis , no carditis , no subcutaneous nodules and no erythema marginatum ; The E.S.R. was not elevated , C - reactive protein was negative , A.S.O. titer was not elevated (table 6).

The mitral valve was affected in the majority of cases , 95.4 per cent , while the tri-cusped valve was rarely affected. The aortic valve was affected in only one case (2.8 per cent). There were 15 cases having pulmonary hypertension with mitral valve affection (table 7).

The total number of cardiac cases among school children aged (5 -15 years) was 47 cases, 35 of them were having rheumatic heart disease.

The incidence of rheumatic heart disease cases was , thus , 74.4 per cent in relation to all cardiac cases (table 8).

| Total No. of Pupils | No. of Rheumatic cases | Percentage % |
|---------------------|------------------------|--------------|
| 8 8 7 8 | 3 5 | 0 . 3 9 % |

Table (1) : The prevalance of rheumatic fever (R.F.) and rheumatic heart disease (R.H.D.) among school children.

| School stage | No. of Schools | No. of pupils | No. of R.H.D. cases | Percentage % |
|---------------------|----------------|---------------|---------------------|--------------|
| Primary Stage | 14 | 5406 | 18 | 0.33 % |
| Preparatory Stage : | 6 | 3472 | 17 | 0.48 % |

Table (2) : The prevalance of rheumatic heart disease cases among primary and preparatory school children.

$$x^2 \quad 1.32$$

$$P > 0.05$$

| Age in Years | 6 - 7 | 7 - 8 | 8 - 9 | 9 - 10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 |
|-----------------------------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| No. of R.H.D. cases | 1 | 3 | 2 | 4 | 5 | 3 | 5 | 6 | 6 |
| No. of C.H.D. cases | 1 | 1 | 7 | - | - | - | - | 1 | 2 |
| Total No. of cardiac cases. | 2 | 4 | 9 | 4 | 5 | 3 | 5 | 7 | 8 |

Table (3) : The age of discovered cases
at the time of examination.

$$X_2 = 19.7$$

$$P > 0.05$$

| Sex | No. of pupils | No. of R.H.D.cases | Percentage |
|--------|---------------|--------------------|------------|
| Male | 4 5 9 4 | 2 0 | 5 7 . 1 % |
| Female | 4 2 8 4 | 1 5 | 4 2 . 9 % |
| Total | 8 8 7 8 | 3 5 | 1 0 0 % |

Table (4) : The prevalance of R.H.D.cases in relation to sex.

$$\chi^2 : 0.41$$

$$P > 0.05$$

| | No. of cases. | Percentage(%) |
|-----------------|---------------|---------------|
| Active cases | 4 | 1 1 . 4 % |
| Quiescent cases | 3 1 | 8 8 . 6 % |
| Total | 3 5 | 1 0 0 % |

Table (5) : The prevalance of active and quiescent rheumatic heart cases among school children.

| Age | Sex | Major manifestations | | | | | | Laboratory manifestations | | | |
|-----|-----|----------------------|----------|------------------|---------------------|----------------------|--------------|---------------------------|-----------|--------|------------|
| | | Arthritis | Carditis | Chorea | Erythema marginatum | Subcutaneous nodules | A.S.O. Tu/ml | C.R.P. | 1st. hour | E.S.R. | 2nd. hour. |
| 8 | ♀ | + | + | - | - | - | 350 | + | 45 | | 90 |
| 14 | ♂ | + | + | - | - | - | 400 | + | 60 | | 110 |
| 15 | ♂ | + | + | - | - | - | 350 | + | 60 | | 110 |
| 10 | ♀ | - | - | Rheumatic Chorea | - | - | - | -ve | 10 | | 17 |

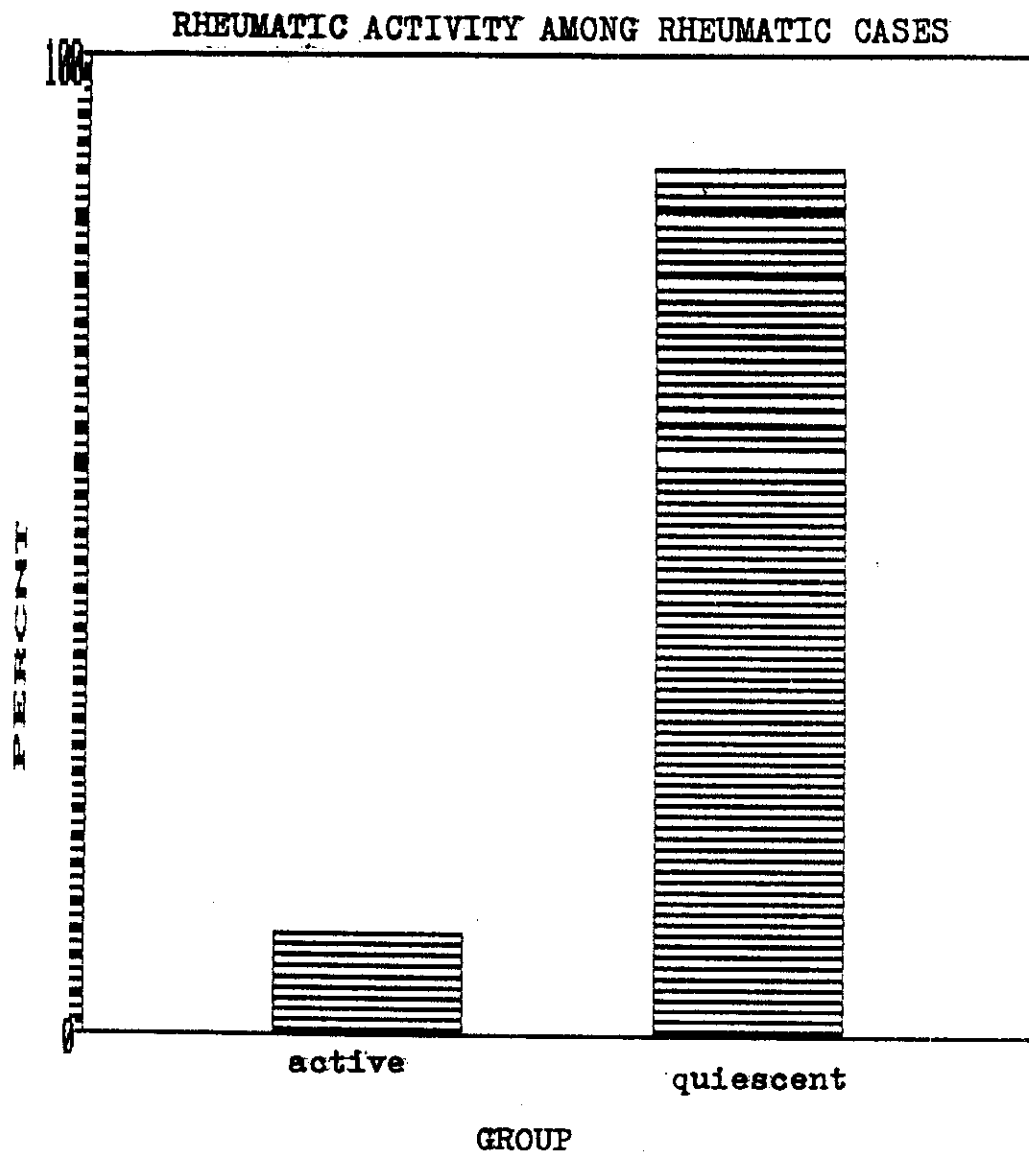
Table (6) : The major and minor manifestations of
rheumatic fever on the studied cases.

| Valve | No. of Cases | Percentage (%) |
|---------------------------|--------------|----------------|
| Mitral | 3 3 | 9 5 . 4 % |
| Aortic | 1 | 2 . 8 % |
| Tricuspid | --- | ----- |
| Pulmonary Hypertension | 1 5 | 4 2 . 6 % |

Table (7) : The valves affected by R.F. &
R.H.D.

| Total No. of Cardiac Cases | No. of R.H.D. Cases | Percentage (%) |
|----------------------------|---------------------|----------------|
| 4 7 | 3 5 | 7 4 . 4 % |

Table (8) : Rheumatic heart cases in relation to all cardiac cases.



PERCENT OF RH. & CONG. HEART IN STUDY CASES

