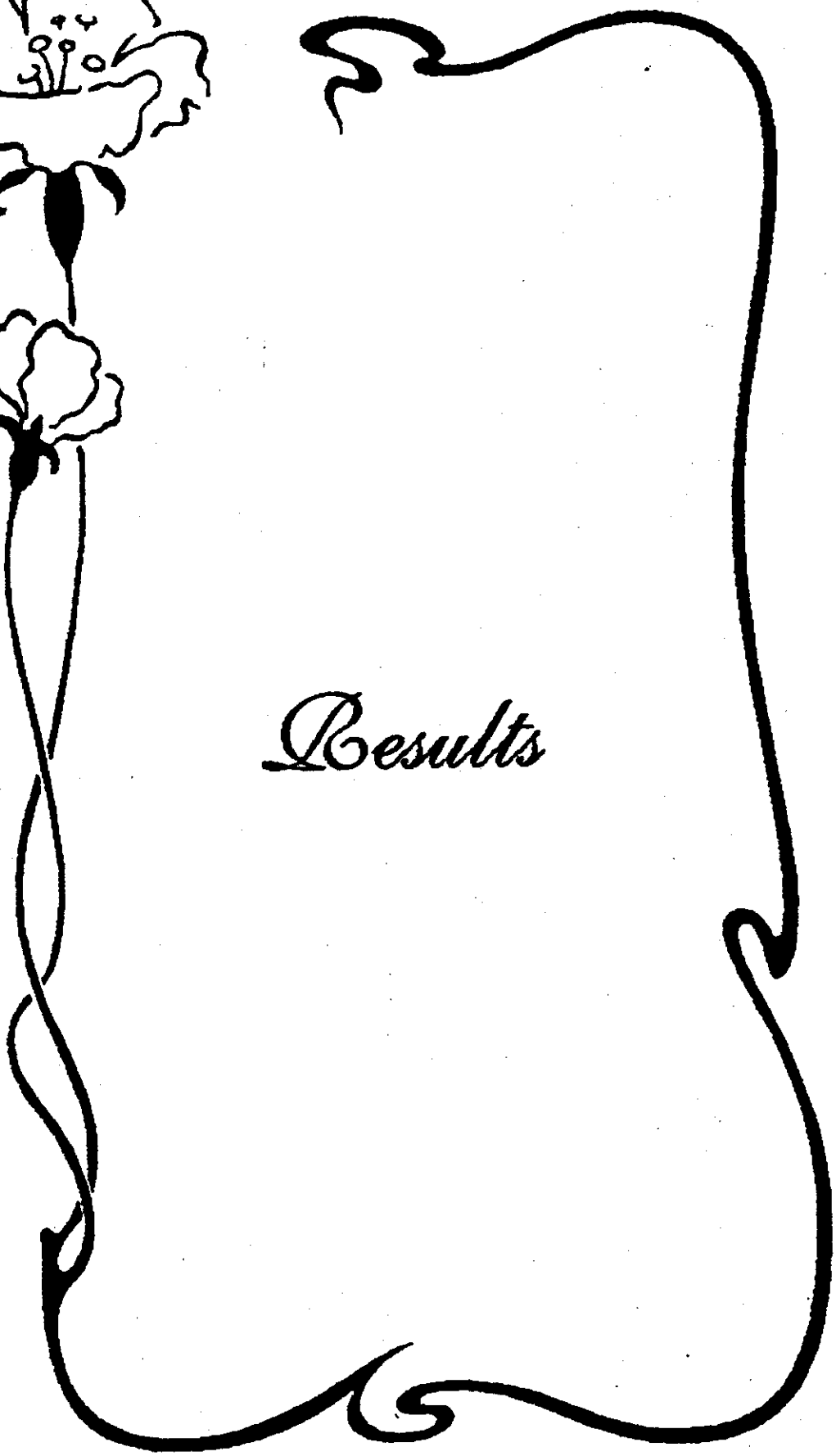




Results



Results

Sera from one hundred and seventy five volunteer girls 10 - 14 years old in kalyubia Governorate were tested by ELISA for detection of rubella IgG and IgM .

Sixty three serum specimens (36%) were found negative for antirubella IgG (the titre is less than cut off control) as shown in (table II) .

One hundred and twelve cases (64%) showed seropositivity with anti-rubella IgG titre ranging from 12.04 to > 100 IU/ml .

No of seropositives were classified according to the detectable Rubella IgG titre as follows : (table III)

- Thirteen serum specimens showed IgG titre of 10 to 25 IU/ml .
- Fourteen serum specimens showed IgG titre of >25 to 50 IU/ml .
- Twenty two serum specimens showed IgG titre of >50 to 100 IU/ml .
- Sixty three serum specimens showed IgG titre of more than 100 IU/ml .

Also , the number of seropositive cases in relation to age was recorded : (table IV)

- At age of ten years , the number of serum specimens was fifty . Twenty six cases comprise 52% were positive for rubella IgG antibodies .
- At age of eleven years , the number of serum specimens was twenty four . Nine cases comprise 37.5% were positive .
- At age of twelve years , the number of serum specimens was eighteen . Twelve cases comprise 66.7% were positive .
- At age of thirteen years , the number of serum specimens was thirty two , Twenty four cases comprise 75% were positive .
- At age of fourteen years , the number of serum specimens was fifty one . Forty one cases comprise 80.4% were positive .

Also , variables related to residence were recorded as follow :
(table V)

- Seventy three cases were from rural areas . Thirty eight of them were seropositive , comprising 52.7% of rural residence cases .
- One hundred and two cases were from urban areas. Seventy four of them were seropositive , comprising 72.5% of urban residence cases .

The same serum specimens were tested for qualitative determination of IgM antibodies to rubella virus .

The results showed that the mean absorbance for the negative controls , cut-off controls and positive controls were 0.067 , 0.468 and 1.770 respectively .

The presence or absence of IgM torubella virus was determined by relating the absorbance value of the sample to that of the cut-off control value . Samples whose absorbance is greater than or equal to the cut-off value are considered reactive. Those whose absorbance is less than the cut-off value are considered non-reactive (according to ETI_RUBEK_M reverse Kit instructions manual) .

All cases ,were non-reactive for IgM to rubella virus and this indicates no recent infection among cases .

Table I : Standards for antirubella IgG .

| Calibrators | IU/ml | Absorbance |
|------------------|-------|------------|
| Negative control | 0 | 0.006 |
| 1 | 10 | 0.353 |
| 2 | 25 | 0.835 |
| 3 | 75 | 1.114 |
| 4 | 100 | 1.923 |

Table II : The rate of seropositivity and seronegativity in studied girls .

| Result | No. | % |
|--------------------------------------|------------|--------------|
| - Seronegative (<10 I.U.) | 63 | 36 % |
| - Seropositive (≥10 I.U.) | 112 | 64 % |
| Total | 175 | 100 % |

Table III : Classification of seropositives according to the detectable Rubella Antibodies IgG titre .

| | Range (IU/ml) | No. of cases | Percentage |
|---|---------------|--------------|------------|
| 1 | 10 to 25 | 13 | 7.43 % |
| 2 | >25 to 50 | 14 | 8 % |
| 3 | > 50 to 100 | 22 | 12.57 % |
| 4 | more than 100 | 63 | 36 % |
| | Total | 112 | 64 % |

Tabel IV : Rate of seropositivity in relation to age .

| age | No. of cases | No. of +ve cases | % of +ve cases |
|------------|---------------------|-------------------------|-----------------------|
| 10 | 50 | 26 | 52 |
| 11 | 24 | 9 | 37.5 |
| 12 | 18 | 12 | 66.7 |
| 13 | 32 | 24 | 75 |
| 14 | 51 | 41 | 80.4 |

Table V : Rate of seropositivity according to residence .

| Residence | No. of cases | NO. of +ve cases | % of +ve cases |
|------------------|---------------------|-------------------------|-----------------------|
| Rural | 73 | 38 | 52.7 % |
| Urban | 102 | 74 | 72.5 % |