

Short report

Journal of Medical Genetics 1989, 26, 667

Updated results of the thalassaemia prevention programme carried out in Latium

Previous results of our programme have been published in this Journal.¹⁻³ Its basic concept is that both the distribution of information about the prevention of Mediterranean anaemia (thalassaemia) and the mass screening for thalassaemia carriers must be carried out much earlier than adulthood and must not be exclusively aimed at pregnant women or already established couples. Early timing of the preventive actions now available provides thalassaemia carriers with a number of options for prevention (including the choice of a non-thalassaemia carrier partner) besides making the option of selective abortion earlier, easier, and more widely adopted.

Based on these grounds, the preventive programme carried out in Latium from 1975 by the Centro di Studi della Microcitemia di Roma, supported by Regional Health Authorities of Latium, consists of the following.

(1) Distribution of information throughout the population of reproductive age, starting with teenagers who can be most conveniently contacted at secondary schools. After this first stage, the most practical and successful methods have proved to be: meetings of the Family Health Services; delivery of pamphlets and other explanatory material to people shortly to be married in the General Registry Office; periodic requests to all Public Health Officers in order to make them secondary sources of the relevant information; and the repeated use of the mass media.

(2) Mass screening of two types: annual screening of final year students in secondary schools, and continuous screening of school leavers, who come on their own initiative to be examined at the Centre. The number of

TABLE 2 Fall in incidence of thalassaemia in Latium from 1975 to 1986.

Years	Incidence of new affected children/100 000 live births	
	No*	%
1975-1976	23/143 156	16.04
1977-1978	24/128 221	18.71
1979-1980	12/116 835	10.27
1981-1982	14/110 332	12.69
1983-1984	8/106 087	7.54
1985-1986	3/ 99 967	3.00

*Statistical data of the Italian Central Institute of Statistics, 1986.

these has increased from an initial 100 per month in 1975 to the present 1800.

(3) Genetic counselling for all single and married thalassaemia carriers. There are about 44 000 such carriers of reproductive age in this region (0.022×2 000 000) and approximately 500 couples at risk.

Up to June 1988 about 60% of the non- α thalassaemia carriers and 55% of the at risk couples of reproductive age in Latium have been identified (table 1) and 36 homozygous fetuses have been aborted. Overall the reduction in the incidence of Mediterranean anaemia achieved in the 1985 to 1986 period by comparison with 1975 to 1976 was 81% (table 2).

I BIANCO, B GRAZIANI, M LERONE,
D PONZINI, M C ALIQUO', AND E FOGLIETTA
Associazione Nazionale per la lotta
contro le Microcitemie in Italia,
Centro di Studi della Microcitemia di Roma,
Rome, Italy.

TABLE 1 Results of the Latium thalassaemia prevention programme (October 1975 to June 1988).

Population screening	
Secondary school students	606 661
Young adults	68 093
Total	674 754
Non-α thalassaemia carriers	
Secondary school students	11 502
Young adults	15 116
Total	26 618
Identified couples at risk	275
Pregnancies at risk investigated	126
Homozygous fetuses aborted	36

References

- 1 Silvestroni E, Bianco I, Graziani B, Carboni C, D'Arca SU. First premarital screening of thalassaemia carriers in intermediate schools in Latium. *J Med Genet* 1978;15:202-7.
- 2 Silvestroni E, Bianco I, Graziani B, et al. Screening of thalassaemia carriers in intermediate schools in Latium: results of four years' work. *J Med Genet* 1980;17:161-4.
- 3 Bianco I, Graziani B, Lerone M, et al. A screening programme for the prospective prevention of Mediterranean anaemia in Latium: results of seven years' work. *J Med Genet* 1984;21:268-71.

Correspondence to Dr I Bianco, Centro Studi della Microcitemia di Roma, Via Treviso 29, 00161 Roma, Italy.