

*ABSTRACTS :*

**THE PREVALENCE AND INCIDENCE OF INSULIN DEPENDENT  
DIABETES IN WHITE (W) AND INDIAN (I) CHILDREN IN LEICESTER  
CITY, U.K.**

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In an attempt to determine the importance of environmental factors in the pathogenesis of IDDM we have examined the incidence (number of new cases/year/ 100,000) and the prevalence (number of existing cases/1000) of IDDM in the Indian and White population in Leicester UK. Since the major migration of Indians to Leicester occurred after 1970 we can examine the effects of being born in the UK, or the length of stay in the UK on the chance of developing IDDM. The prevalence of insulin dependent diabetes defined as wasting, hyperglycaemia and ketonuria was found from the "U 100" Diabetic Register and a Leicester City census delineating race which was conducted in 1983 : the results are expressed as cases per 1000 for each age range in years and both racial groups, \*= $p < 0.01$  (odds ratio).

0-9 years : 0.3(I), 0.4 (W)  
(I mainly U.K. born)

10-15 years : 1.0(I), 1.9 (W).  
(I 50% U.K. born)

16-24 years : 0.3(I), 1.8 (W)\*.  
(I mainly non U.K. born)

25-30 years : 0.5(I), 3.0(W)\*.  
(I mainly non U.K. born)

The childhood (0-15) incident data from 1970 was compared for the two races. Case numbers were small for 'I' so 4 year moving averages were used. This demonstrated a significantly lower 'I' incidence in 1970-1975 than 'W', and a significantly different rate of increase : 'I' increasing by 11/100,000/year/decade, 'W' increasing by 4/100,000/year/ decade.

By 1981, 73 % of the 'I' diabetic children were born in the U.K. whereas 28% of the 'I' non-diabetic children were born elsewhere. If environmental factors such as place of birth are important as risk factors for childhood diabetes then, by using our figures from the data of diabetic children who were not born in the U.K., we could predict an incidence of 1/100,000 (95% confidence limits 0.1-4) and a prevalence of 0.2/1000 (C.L.O. 1 -0.4) for Indian children in India. If this was confirmed by data from India it would emphasise the importance of environmental factors in the pathogenesis of IDDM.