

Consensus statements from
'WORKSHOP ON TYPES OF DIABETES PECULIAR TO THE TROPICS — 1995'
Cuttack, India, 17–19 October 1995

Diabetes syndrome in the tropics

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Background information

It is widely accepted that clinical manifestations of the 'Diabetes Syndrome' in the tropics and sub-tropics differ in certain respects from those commonly observed in the populations of European origin.

Based on a large number of reports on observations from several tropical and developing countries and intensive work, especially at certain centres in India, the National Diabetes Data Group (1979), WHO Expert Committee (1980) and finally the WHO Study Group (1985) on diabetes recognised Malnutrition-Related Diabetes Mellitus (MRDM) as a class of clinical diabetes and subdivided it into (a) Fibrocalculous Pancreatic Diabetes (FCPD) and (b) Protein-Deficient Pancreatic Diabetes (PDPD).

This recognition was of great help, but could not succeed in laying to rest the divergent opinions and controversies on these forms of diabetes, particularly with respect to PDPD, possibly because it occurs only in certain geographic areas where malnutrition is prevalent (not in all); also because of the lack of specificity in its diagnostic criteria and inadequate information on its genetic and pathogenic character. Soon the term Protein-Deficient Pancreatic Diabetes was substantially replaced by the term Protein-Deficient Diabetes Mellitus (PDDM) as there was no evidence of exocrine pancreatic involvement in this clinical setting.

Further, it was observed that FCPD did occur fairly frequently in well nourished individuals in the absence of alcohol intake, gall bladder disease or hyperparathyroid state. Its classification, along with other primary forms of diabetes and the suggestion that it occurs specifically in

malnourished subjects, was widely felt to be inappropriate.

In order to find some solutions to these controversies, members of the Diabetes Research Group, Cuttack (Orissa, India), decided to convene an International Workshop to thrash out all available data on the subject and to evolve a consensus which would be placed before the WHO, IDF, NIH and other World bodies for their information.

It was decided that this workshop should be different from such efforts elsewhere (particularly one held by WHO and the Wellcome Foundation in London in 1988) by including demonstrations of clinical material — ie patients manifesting the types of diabetes considered to be peculiar to the tropics — so that discussions might not be confined to veering around perceptions without scope for verification.

It should be stated here that Cuttack was the place in India where J-type diabetes (PDDM) was first recognised (late 1950s) and the crucial role of malnutrition on the manifestation of its atypical features was first conceived. Further, it is one of the few places where patients with PDDM as well as those with FCPD are both seen in adequate numbers.

The Workshop was held as scheduled on 17, 18, 19 October 1995. Presentations included clinical data, experimental observations, pathology of the pancreas, genetic HLA connections, GAD and ICA antibody findings as well as 25 patients belonging to categories designated as PDDM, FCPD and Lean NIDDM. The consensus statements formulated are listed below.

The workshop was held in India and attended by 60 delegates mostly from four developing countries (India, Bangladesh,

China and Ethiopia) with observers from Europe and America.

Such knowledge was presented and discussed at the Workshop to serve as a stimulus to the necessary further research into the aetiological, epidemiological and clinical aspects of such diabetes.

From the discussions the following three consensus statements were advanced.

CONSENSUS STATEMENT: MALNUTRITION RELATED DIABETES MELLITUS

1. All cases of diabetes mellitus can be divided into IDDM and NIDDM according to their current clinical and metabolic state.
2. Although the term MRDM has served a valuable purpose it should now be revised in the following way:
 - (a) The term Malnutrition Modulated Diabetes Mellitus (MMDM) to replace PDPD
 - (b) Fibrocalculous Pancreatic Diabetes (FCPD) to be considered as a specific form of diabetes.
 - (c) The low body weight (BMI < 18.5 kg/m²) end of the spectrum of NIDDM, to replace the term 'Lean NIDDM'.

CONSENSUS STATEMENT: FIBROCALCULOUS PANCREATIC DIABETES

1. Fibrocalculous Pancreatic Diabetes (FCPD) is a form of diabetes with a high prevalence in tropical and developing countries.
2. FCPD is due to chronic calculous pancreatopathy not to chronic alcoholism or other recognised ascribable causes such as hyperparathyroidism.

3. It is usually seen in young and malnourished individuals but also occurs in others.
4. Diabetes and pancreatic calculi and/or ductal dilatation are essential features. Recurrent abdominal pain and steatorrhoea are other important features but absence of these latter does not preclude the diagnosis.
5. The clinical profile of this type of diabetes shows a spectrum of hyperglycemia varying from severe to mild. Ketosis is uncommon.
6. Pancreatic calculi are usually large, multiple and intraductal. Marked ductal dilatation and fibrosis are usual; inflammatory changes are uncommon.
7. Abnormal exocrine pancreatic function is invariably present but is often demonstrable only following investigation.
8. FCPD is associated with an increased risk of pancreatic carcinoma.
9. Management of FCPD includes treatment of diabetes, oral enzyme replacement and relief of pain. Surgery may be required for severe intractable pain and for other indications.
10. The aetiology of FCPD is uncertain. The roles of nutritional, environmental and genetic factors need further investigation.

**CONSENSUS STATEMENT:
NIDDM IN LEAN SUBJECTS**

1. This group supports the WHO classification of NIDDM into obese and non-obese sub-classes.
2. In some developing countries, non-obese patients constitute the more common category and a proportion of them have BMI of less than 18.5.
3. There are many factors which are not well understood in these subjects with NIDDM and low body weight. Further research is required in this group.

SHORT REPORT

Diabetic and endocrine 'phone-in': a useful adjunct to the standard follow-up clinic

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We report our experience of a diabetes and endocrine 'phone in' service as a substitute for some outpatient attendances.

Some aspects of the management of diabetes and thyroid disease do not necessarily require outpatient attendance, for example therapy alteration in response to results of tests.

Since April 1992, a telephone consultation service has been operating in our hospital for one hour per week. This comprises two telephone lines manned by a consultant physician and a diabetes specialist nurse and directly accessible to patients. There is a link-up to the biochemistry department for results. A log of all calls is kept, which facilitates audit of the nature of each enquiry and the action taken. Hospital case-notes are only sought for calls which have been pre-arranged.

Within six months of its launch, the 'phone-in' had reached saturation point. Patients who cannot get through have been instructed to ring the endocrine secretary, who arranges a return phone call from the physician as soon as it is possible. More recently the session has been extended to 90 minutes. Median number of calls per month is 45 (range 29–62), of which consistently two-thirds are from hyperthyroid patients seeking thyroid function test results and recommendations about the modification of their anti-thyroid drug dosage. The remaining one-third of calls are almost entirely from diabetic patients seeking advice on therapy dose adjustment in response to their own blood glucose monitoring. Fewer than 5% of calls are from other health care professionals.

Since the introduction of the 'phone in'

we have been able to double the interval between outpatient follow-up visits to the diabetes and thyroid clinics. We share the belief of others^{1–3} that planned telephone calls make the most effective use of professional time, and lead to less crowded outpatient sessions. Our experience with this venture has resulted in a planned expansion of the service with more consultant time devoted to telephone consultation in the future.

References

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