diabetes mellitus in thalidomiders with upper extremities malformations

Thalidomiders and Diabetes: A combination with unsuspected problems.

Diabetes is considered as „the pest of the 21st century“. With hypercaloric nutrition as one of the main riscs factors, diabetes is very common in Europe, USA and on the rise in many „developping countries“.
According to third party payers, prevalence in Germany was 8% in 2007, corresponding a total of 6.3 million germans [1] beeing treated for diabetes type 2 condition with a large number of non diagnosed cases.

It can be expected that more than 200 thalidomiders in Germany will develop diabetes. As to the knowledge of the medical commission of the thalidomide foundation, there are no known problems arising from this combination but general consideration leads to the assumption that the following problems may arise and we invite all thalidomiders with diabetes to share their experience with us.

Likely problems in the combination of diabetes and shortened / no arms:

1.) Application of subcutaneous insulin injections with pens and syringes and opening the glass ampoules with the insulin may prove difficult.
2.) It may prove difficult to reach a suitable body region for the injection (abdomen) with very short arms
3.) Difficulty in adjusting the correct dosage with the insuline pen as the pen can not be held in an adequate distance to the eyes to identify the small numbers in the dosage adjustment wheel in compensation to increasing age presbyopia (can be compensated with glasses)
4.) Incapability to manage foot care. Foot care is extremely important in diabetic persons since diabetic polyneuropathy may prevent the patient from taking notice of small wounds of the foot.
5.) Checking the blood sugar may prove very difficult with short arms due to difficulty to manage the blood stix device and reduced body surface area to draw the blood sample (lack of fingers)
6.) Difficulty in participating in disease management programs due to:
    a. Difficulty to reach the doctors cabinet due to additional thalidomide damage oft he lower extremities in some cases
    b. Blood samples (venous blood for HbA1c check) may be very difficult to obtain due to anatomic reasons in short armed thalidomiders.
    c. Additional diagnostic procedures like measuring the blood pressure will prove difficult and the results may be unreliable in short arms.

Diabetes and short arms may add up to a very unfavourable combination concerning patients remaining autonomy.

[1] Deutscher Gesundheitsbericht Diabetes 2010, http://profi.diabetesde.org/fileadmin/users/Patientenseite/PDFs_und_TEXTE/Infomaterial/Gesundheitsbericht_2010_Gesamt_28_10_2009.pdf, p 9

When the thalidomide foundation was founded and the keys for financial compensation of the varying thalidomide handicaps were established, neither the aspect of diabetes caused by handicap via physical inactivity nor the inability / difficulty to manage blood sugar regulation with short arms was taken into consideration.

Todays disease management programs demand a certain performance which has to be furnished by the patient himself which may prove very difficult with impaired function of the upper extremities.

Post scriptum Nov. 30th 2013
With diabetes mellitus beeing a very common medical condition, enormous effort is invested to enhance disease management. Past decades saw the replacement of dosing insulin with syringes by administration of insulin via a pen. Autonomous systems which can monitor blood sugar and administer the needed insulin dose in response are subject to intensive investigations and may prove extremely useful for patients with upper extremity deficiency.