

The difficulty of insulin in the management of diabetes in the elderly

M Jemal, H Sayadi, I Kochtali

Department of Internal Medicine and Endocrinology, University Hospital Fattouma Bourguiba, Monastir, Tunisia

Introduction

Insulin therapy is often an essential treatment of diabetes in the elderly. It has undeniable advantages in the elderly but problematic as the acceptability and the feasibility. The objective of this work is to illustrate the problems of insulin and deduct education measures

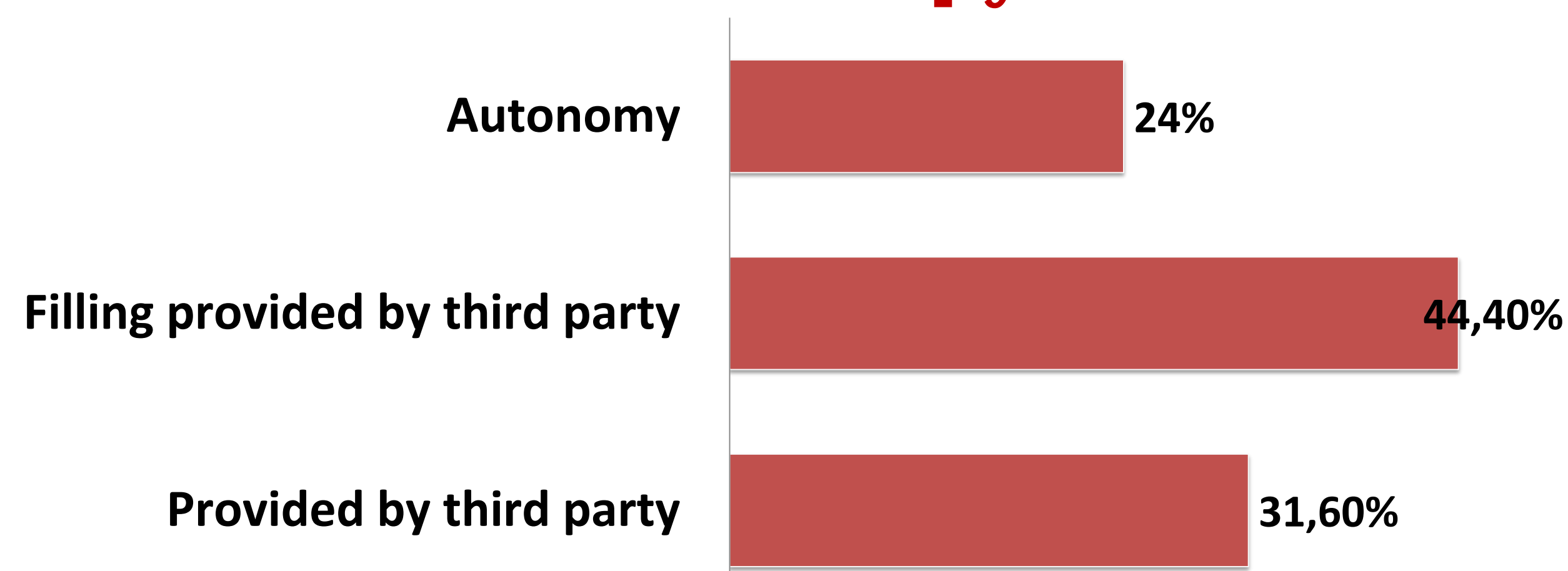
Patients & Methods

This is a prospective study of 63 elderly diabetic patients collected in Endocrinology department in the CHU Fattouma Bourguiba Monastir.

Results

- The mean age was 71.12 ± 5.48 years
- Patients are illiterate in 79% of cases
- The mean duration of diabetes was 12.3 ± 4.3 years
- Diabetes was unbalanced in all cases, with an average A1C to $11.87 \pm 1.8\%$
- A refusal at the announcement of the transition to insulin was raised to 36.5%.
- Double dose insulin was prescribed in 60.3%
- Analogous insulin was possible in 22.2% cases

Insulin therapy



- Insulin is provided entirely by another person in 31.6% of cases, which can be either family (79%) or neighbor (21%)
- The difficulty resides in the filling of syringes (53%) with respect to either a visual handicap due to the presence of diabetic retinopathy in 44.4% of cases and cataract in 22% of cases or physical disability a hemiplegic following stroke (8%), with a disorder or senile rest (10%) cases.
- 35% of patients have a functional glucose meter and blood glucose self-monitoring is carried out by 28% of them
- Hypoglycemia was noted in 19%
- Four patients (6.3%) provided an adjustment of their doses to hypoglycemia (3 cases) and hyperglycemia

Discussion & Conclusion

- This study clearly shows that technological improvements observed in recent years in the treatment of diabetes, such as the availability of new and new insulin injection devices, the greater availability of methods of SMBG, although not supported by the National Health Insurance Fund, does not have a beneficial effect on improving glycemic control in diabetic patient when there are persistents gaps in patient education.
- Thus, the hope of obtaining a better glycemic control involves participation more active environment.
- In addition, use only insulin earlier is desirable in these patients after failure of oral antidiabetic agents while using specific education targeting this population and insulin pens. Constitutes a choice of ease, comfort and safety for the patients.
- Enhancing patient education in a continuous and evolving process is therefore a priority in the management of diabetes.
- When prescribing insulin or oral agent regimens for this population, providers should pay special attention to possible side effects and drug interactions.
- Long-acting basal analogues are associated with a lower frequency of hypoglycemia than conventional insulins in this age group.
- In elderly people, if mixture of insulin is required, the use of premixed insulins as an alternative to mixing insulins minimizes dose errors.

Bibliography

1. Diane Chau & al, Volume 19, Number 4, 2001 • CLINICAL DIABETES
2. Harper W & al. Diabetes Association 2013 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada: pharmacologic management of type 2 diabetes. Can J Diabetes 2013;37(suppl 1):S61-S68.