Conclusion

When we started working on nutrition and aging in Toulouse, we worked first on nutritional markers. Our problem was that there were too many nutritional markers: anthropometry; biological markers, bioelectric impedance, DEXA, and so on. We had the same kind of problem with dementia and Alzheimer disease. There is no unique marker for Alzheimer disease, so we needed a reliable means of neuropsychological assessment. A very useful tool turned out to be the Mini Mental State Examination (MMSE). We felt that if we could design a tool like the MMSE for nutrition, this might be a helpful part of geriatric assessment, since at the time nutritional assessment did not feature in most geriatric assessments. We met Yves Guigoz at the World Congress of Gerontology Association in Acapulco 8 years ago, and we corresponded with him about this aim. As a result he visited us in Toulouse and we started collaborative work on the MNA.

The MNA has the same problems as the MMSE – it is not a perfect tool. We had no ambition to design a perfect tool, but we wanted a tool that could be helpful. When the MMSE was first presented to neurologists, most of them said that they did not need it. They claimed they could make a clinical diagnosis of Alzheimer disease without the MMSE. But for most general practitioners without detailed knowledge of Alzheimer disease, the tool was very useful.

The MNA follows the same kind of plan. We wanted a tool that was easy to perform, cheap, standardized (for use in comparing data), and useful in teaching. The teaching role is very important, because residents and fellows as well as dieticians need to learn how to do anthropometric measurements, how to assess body mass index, and how to provide nutritional intervention. We know now that in some big hospitals in the USA malnutrition was recognized in <40% of patients, while nutritional support was given to few of them, though a diagnosis of malnutrition on discharge was never mentioned. That is why there is a lot of work to be done in this area, and physicians, residents and fellows all need additional training. To encourage this, you need a tool. We have tools for cognitive function, we have tools for affective function, we have tools for autonomy; we now needed a tool for nutrition.
What I would like you to remember is that in the past medicine was purely clinical: the physician had only his hands to cure the patient. Now, medicine is too paraclinical: we have too many investigations. What does a physician do when he sees a patient? He orders clinical chemistry, he orders radiology, he orders hematology. The problem is that the social security systems are reluctant to pay for these tests. Geriatric assessment paves the way towards a new type of medicine, one that lies between the purely clinical and the overinvestigative. This geriatric assessment is our new technology for geriatric medicine. We know now from the work of Larry Rubenstein that geriatric assessment can reduce morbidity and be cost-effective. We need to show that this type of geriatric assessment represents a truly new technology by adequate validatory research, as presented in this meeting.

This tool is also cheap. This is the right direction to be moving in, both for medicine and for social security systems. We believe that geriatric assessments need to be the same in different countries. If you go to Toulouse, to New York, or to Mexico City and have your blood pressure taken, everybody does it the same way. We need comparable standardization for geriatric assessment so that we can collect comparative data. Geriatric assessment is a means of early detection, early intervention, and improved results. In elderly people, if we intervene too late, this generates additional problems. This is very important.

When we work on geriatric assessment, we need to think about intervention. If the MNA score is around 24 points, we need to suggest ideas on improving the quality and quantity of the food intake. If the MNA is < 17, it generally means there is protein-energy malnutrition. Such people will have low albumin and weight loss, and we must increase the patient’s weight and follow other biological markers. For people with a score between 17 and 22.5, there is the possibility of detecting malnutrition before the onset of weight loss, and before there is low albumin. Under such circumstances intervention will be more successful. We also need to look carefully at the areas where patients lose points: for example, if they suffer from weight loss, we need to look at the cause of the weight loss; if they take more than three drugs, we have to look at what kind of drugs are being given and whether they can be changed or discontinued; if there is a mobility disorder, we need to determine what help can be provided; or if there is depression, this can be treated.

In relation to dietetic assessment, if we find patients who are having only one or two meals a day, we need to help them. If we find people who eat little in the way of fruit or vegetables, we must encourage them to take more, since there are many data showing how important it is to eat these foods. Such interventions are a really important part of the MNA.

To finish, I would say that geriatric assessment takes time, but good medicine takes time also, and we must not forget that this is our technology. A gastroenterologist who wants to do a gastroscopy will have to take time to do it, but the gastroscopy will be very useful.
In the future we may need to have two assessments: a short form for healthy elderly people and a longer form for frail people. But the question remains as to whether or not we need to screen healthy elderly people. We know that the prevalence of malnutrition will be very low in such people, only 2–5%, and it may be best to reserve MNA for those people who experience weight loss or anorexia. We need to do more work on the value of the short form of assessment for healthy elderly people.

For frail elderly people, we need two things. The first is a geriatric team, because we cannot expect everybody to do geriatric assessment. Not everybody can do a gastroscopy; there is no one who can do everything. Maybe the best way would be to build up the expertise on geriatric assessment in hospitals. Secondly, for the family practitioner or private practitioner, we need to negotiate with our social security system over how it might be possible to pay for or to reimburse this kind of geriatric assessment. We can work towards convincing the social services that it is better to fund this kind of assessment than to fund excessive numbers of expensive and often unnecessary chemical and radiological tests.

Finally, I would like to thank Nestlé Clinical Nutrition for their support in developing MNA from the start.

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