

# Easing the pressure

A new study reveals the role of oral nutritional supplements in healing pressure ulcers, writes **Joanne McCarthy**



Prof Jos Schols

MALNOURISHED patients are far more likely to develop pressure ulcers than those with a healthy diet, and new research has shown that giving at-risk patients oral nutritional supplements can not only prevent pressure ulcers, they can also speed up the healing process.

Malnutrition in patients in developed countries is a far greater problem than most people realise. Statistics suggest that between 25 and 40% of nursing home patients and between 35 and 50% of hospital patients are malnourished.

If a patient is malnourished, the slightest pressure on their skin can cause pressure ulcers, and their continued malnourishment will prolong the healing process.

## CUBE study

A study conducted at the Maastricht University in the Netherlands has now revealed that giving people with pressure ulcers an arginine-enriched oral nutritional supplement containing extra protein, energy and other relevant nutrients significantly improved pressure ulcer healing.

The CUBE study also showed that the use of oral nutritional supplements is likely to reduce the overall cost of pressure ulcer care. Significantly fewer dressings were required and less time was spent on changing the dressings.

Prof Jos Schols of Maastricht University, who was involved in the study, speaking to *WIN*, stressed the importance of the research.

"We have long established that there is a relationship between pressure ulcers and malnutrition. Merely treating the wound itself is not enough. The patient should be supported nutritionally so that they can regain their energy, otherwise they will continue to

get pressure ulcers and wounds," he said.

Cubitan, the supplement given to the patients in the CUBE study, contains appropriate amounts of protein and energy and is also enriched with arginine, vitamins, zinc and folic acid, which can help strengthen tissue resistance, preserve tissue viability and promote tissue repair, the researchers said. The effect of Cubitan on pressure ulcer healing was assessed in non-malnourished patients.

"Only normally nourished patients with pressure ulcers were included in the trial. In most studies, malnourished patients are included, but then you don't know if you are treating the pressure ulcer or the malnourishment. We wanted to find out whether the supplement would have a direct effect on healing," Prof Schols explained.

The study found that taking the supplement had a very positive effect on the healing of the wound and its closure occurred much faster. While previous studies have shown that nutritional supplements prevented pressure ulcers, this is the first scientifically appropriate study to prove that they also improve healing. In addition to this, they reduce wound care burden.

Prof Schols stressed that when a patient is at risk of malnourishment, the first intervention should always be to try and meet their nutritional requirements through normal food intake. However, this is not always possible and when a patient is not getting adequate nutrition through food, they should be given an oral nutritional supplement, he said.

"We want to look after patients as best we possibly can and we would never promote inappropriate use of oral nutritional supplements. Of course, they will only be

given the supplement until the problem is fixed, they won't be given it for the rest of their lives," Prof Schols explained.

Every patient with a disease, and particularly those patients that are older and immobile, is at risk of developing pressure ulcers. If a patient is malnourished, the risk is even higher, Prof Schols stressed.

## Guidelines

The CUBE study coincides with the introduction of new international guidelines on the care of pressure ulcers. The guidelines are the result of a joint initiative between the European Pressure Ulcer Advisory Panel and its US equivalent, the National Pressure Ulcer Advisory Panel.

For the first time, the international guidelines emphasise the importance of nutrition in wound and pressure ulcer care and state that every patient with or at risk of pressure ulcers should be nutritionally screened.

"Patients must receive the right nutritional attention. The guidelines advise on how much protein, calories and vitamins you should give, and how much fluid is recommended," said Prof Schols, who was involved in preparing the guidelines.

It is recommended that patients with, or at risk of, pressure ulcers take 30 to 35 kcal/kg and 1.25 to 1.5 protein/kg per day. The guidelines advise that if a patient is ill and isn't consuming enough food, then it is important to use an oral nutritional supplement in addition to their meals. When this is not enough, tube feeding should be considered.

New Irish guidelines on pressure ulcers have also been introduced recently. The recommendations of the new international guidelines have been incorporated into the Irish ones (see page 46).