Case reports

professional® dietetics

Clinical Case 1

Clinical case by Doctor Arnaldo Bombaglio

Clinical history

84-year-old woman, known for severe dementia with behavioural disorders (wondering – agitation P/M) . Osteoarticular symptoms characterised by gonarthrosis and bilateral coxarthrosis, complicated in March 2005 by right femoral pertrochanteric fracture, treated with intramedullary synthesis. Since then, she has been unable to walk unaided and she is both bed- and wheelchair-bound. Vigilant, non-collaborative, disoriented in space, time and person. Poor speech, only understands simple questions and expresses herself with few words. Only eats when fed. Uses absorbent devices due to double incontinence and has been carrying a CV for approximately one month.

Poor intake of food and liquids with a tendency towards dehydration. Slight level of albuminemia - 38 g/L (n.v. 35 – 52) - reported in May '06.

Presence of stage III and IV pressure ulcers in the sacrum and right heel.

Admitted to a Nursing Home on 07.10.06.
Barthel Index 5/100 Exton-Smith Scale 9/20 SPMSQ 8/10 MMSE 12/30

First phase regime: From 07.10.06 to 16.10.06

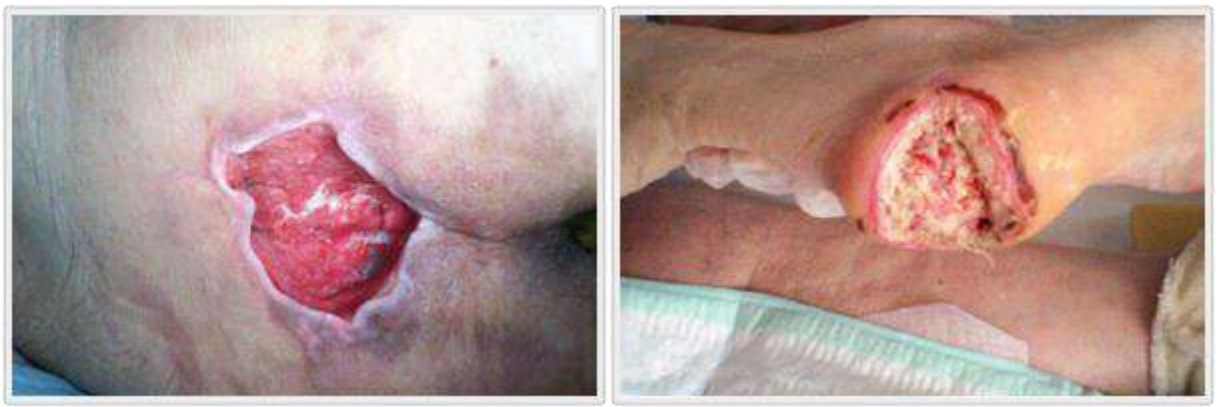
Treatment of injuries 07.10.06
Surgical dressing of the right heel lesion. Extensive necrotic eschar removed. Cleansing with hydrogen peroxide and physiological lavage. Medication with collagenase + chloramphenicol.

Surgical dressing of the sacral lesion. Cleansing with hydrogen peroxide, lavage with saline solution and resin diffusion with Ligasano.

11.10.06
Surgical dressing of the lesion on the right heel. Cleansing with hydrogen peroxide and physiological lavage. Medication with collagenase + chloramphenicol. Sacral lesion: cleansing with hydrogen peroxide, lavage with saline solution and resin diffusion with Ligasano.

16.10.06
Surgical dressing of the lesion on the right heel. Cleansing with hydrogen peroxide and physiological lavage. Medication with collagenase + chloramphenicol. Sacral lesion: lavage with saline solution and resin diffusion with Ligasano.

Result: stabilisation of lesions



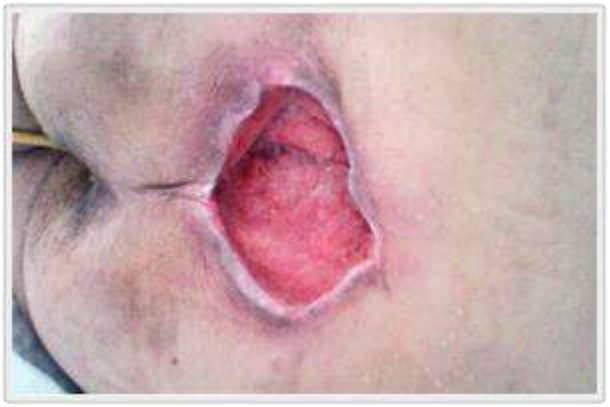
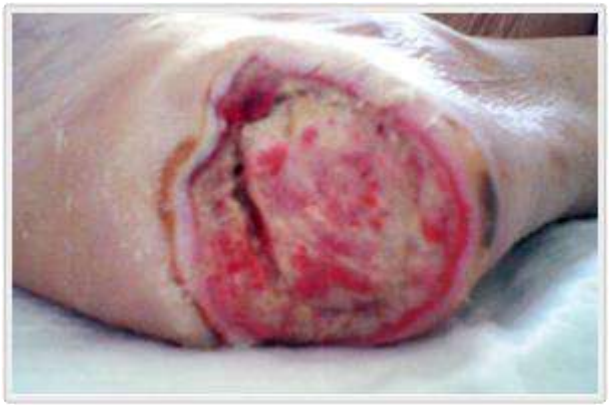
Second phase regime:

26.10.06
Begin medication with Vulnamin. Lesion on the right. Presence of slough at the base of the lesion. Lavage with saline solution, application of Vulnamin powder and secondary dressing with LIGASANO. Cleansed sacral lesion. Lavage with saline solution, application of Vulnamin powder and secondary dressing with Ligasano.

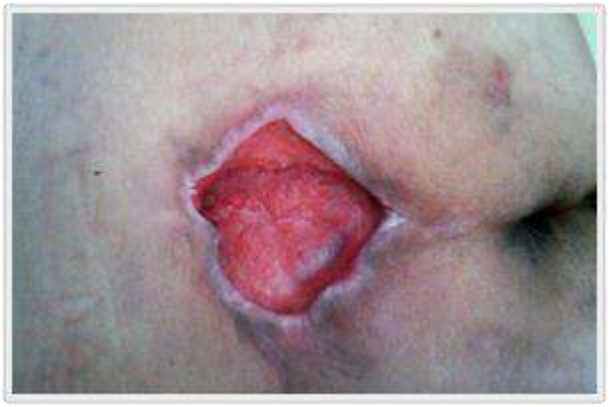
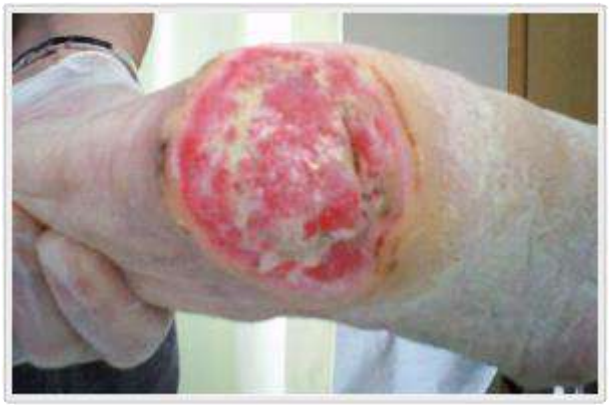
Result:

a complete healing of the lesions is achieved after several phases of progressive improvement

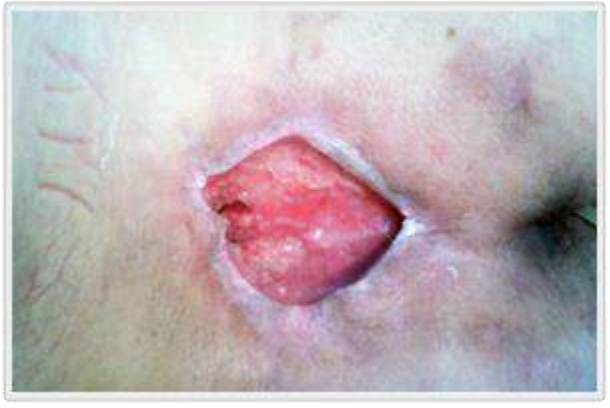
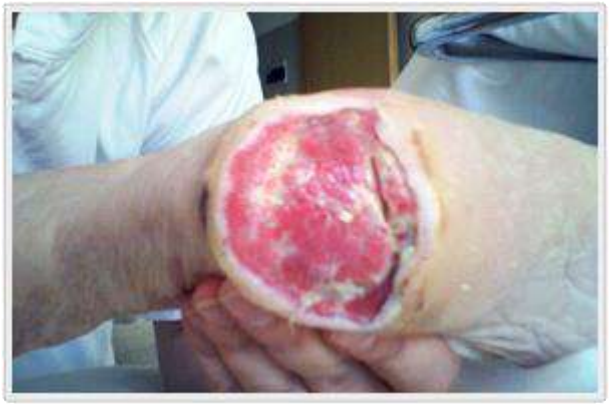
26.10.06 – Lesions on the sacrum and heel

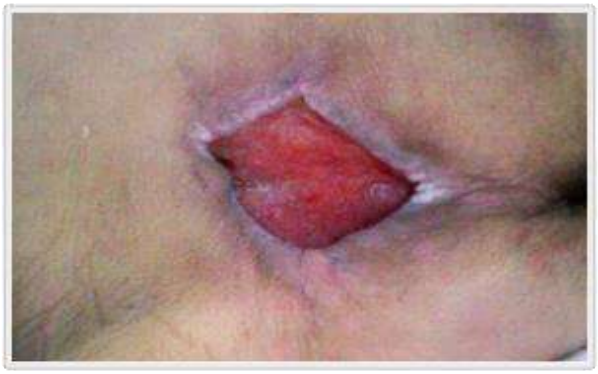
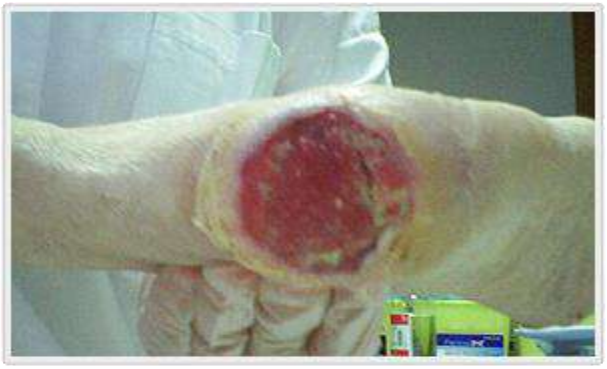
04.11.06
Medication as above.

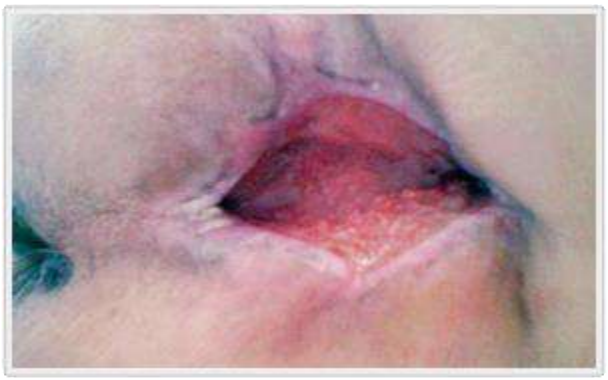
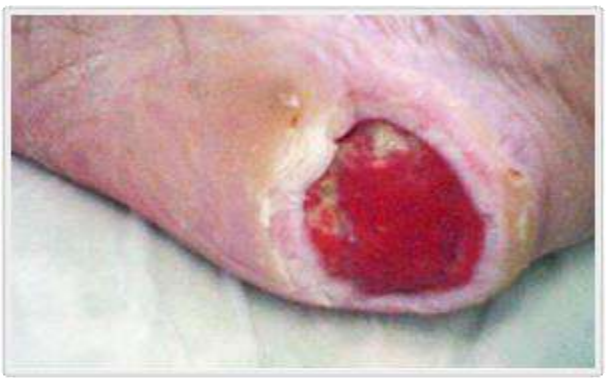
09.11.06
Net improvement of both lesions, with significant growth of granulation tissue. Continue the medication in progress.

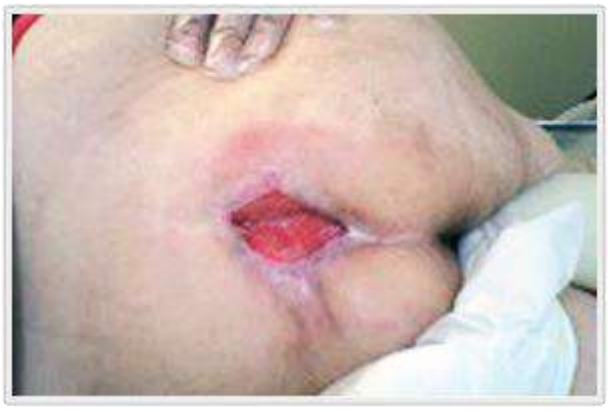
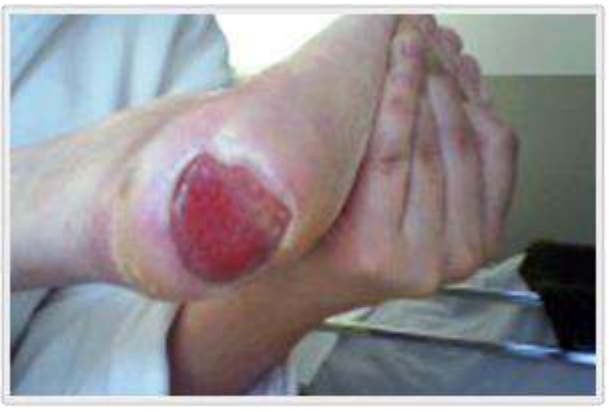
16.11.06
Vulnamin powder is replaced with Vulnamin cream.

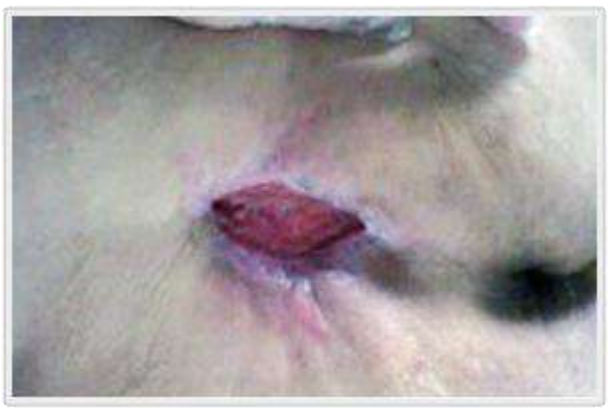
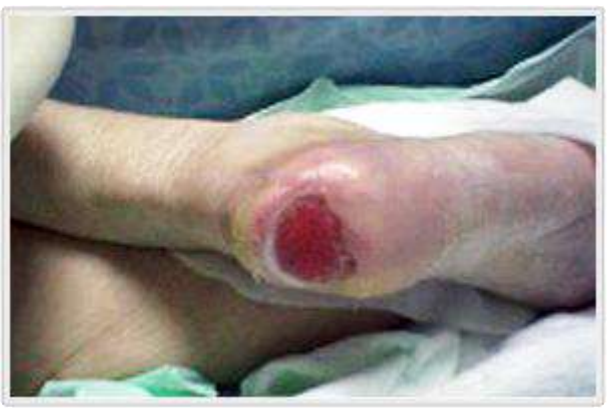
21.11.06

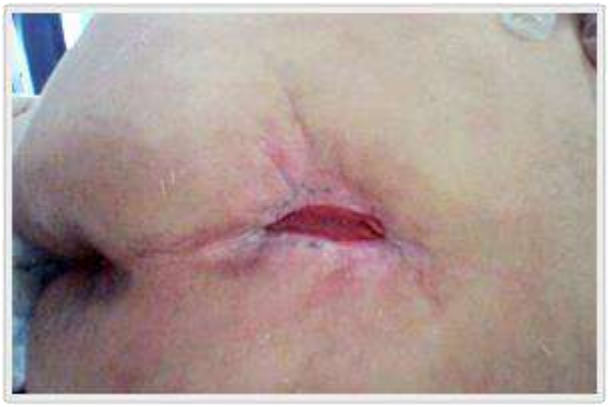
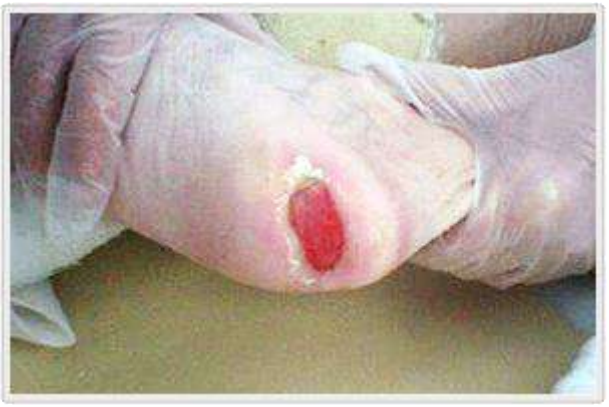
30.11.06

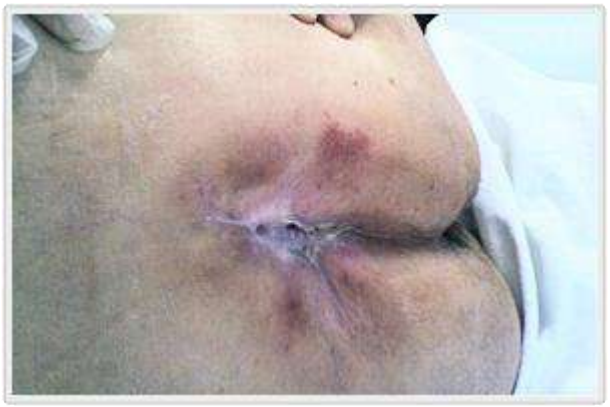
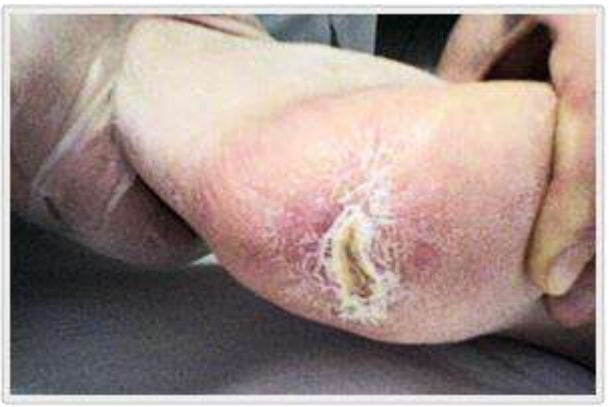
11.12.06

23.12.06

14.02.07

Clinical Case 2

Clinical case by Dr. Elena Abati, Dr. Alberto Ponzoni

Past medical history

58-year-old male, Italian.

1999: diagnosis of Raynaud's Syndrome. High blood pressure.

June 2005: pain in right leg and foot with local hypothermia. Diagnosis: stenosis of the posterior tibial artery and occlusion of the anterior tibial artery. Medical treatment.

October 2005: percutaneous peripheral angioplasty of the right lower limb.

November 2005: pain again in the right lower limb. Right lumbar gangliectomy. CREST syndrome systemic sclerosis is diagnosed.

March 2006: gangrene and subsequent disarticulation of 4th and 5th toes on the right foot.

May 2006: temporary neurostimulator implant.

July 2006: amputation of the right thigh, at the middle third.

August 2006: review of the amputation stump due to necrosis of the distal part of the stump (methicillin-resistant *Staphylococcus aureus*).

August 2006: admitted to the rehabilitation centre with persistent diastasis of the surgical wound with a fistula portion measuring 6 cm.

Therapeutic regime during admission: from 02.08.06 until 02.10.10

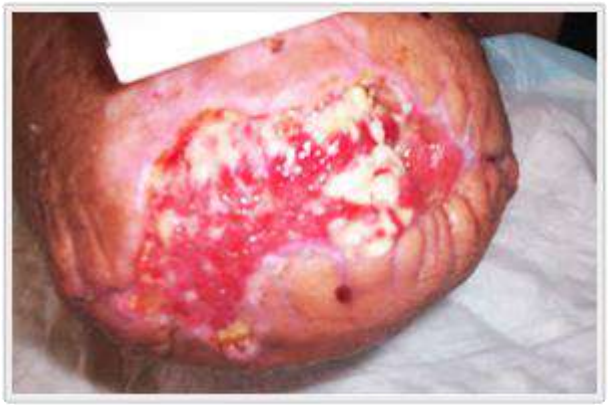
Initial local treatment: disinfection with Saline Solution and Betadine diluted to 50%, cleansing with Saline Solution, Aquacel Ag.

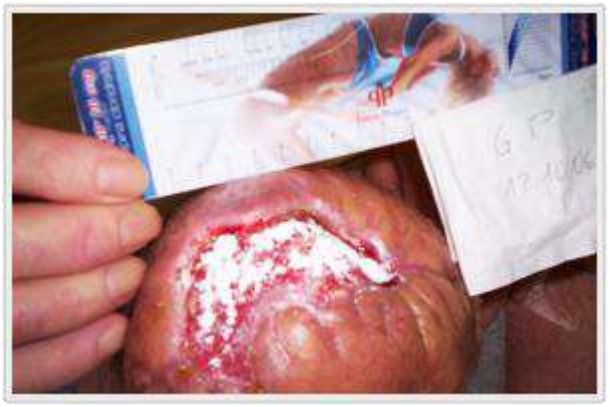
Systemic treatment: in effect since 21 August 2006, Vancomycin 2 g/day. Rifampicin 900 mg/day. This treatment continued until 2/10/2006, when treatment with Vulnamin was initiated.

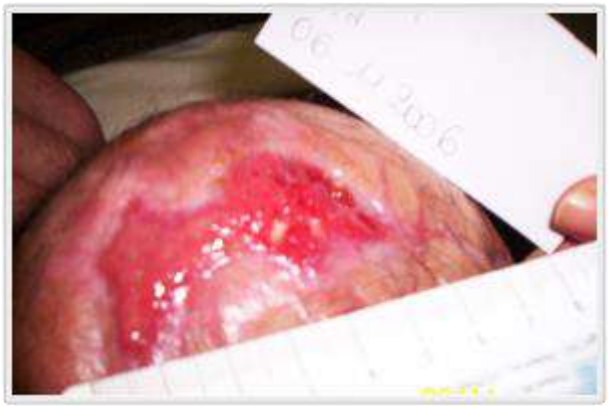
Regime used: disinfection with Saline Solution +Betadine at 50%, cleansing with Saline Solution.
Application of Vulnamin powder + Vulnamin Cream + Aquacel Ag; as of 12/10/2006, Aquacel Ag was replaced with Adaptic.

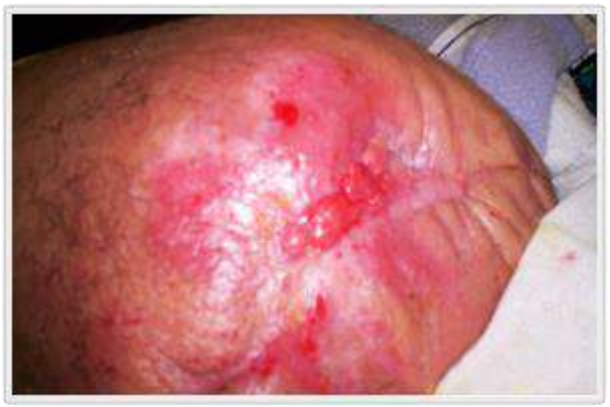
The patient returned home and continued the local dressing treatment at our Outpatients' Department.
The dressing regime was changed on 06.11.2006, by discontinuing the Vulnamin powder and leaving only the Cream and coverage with ADAPTIC.

Complete healing: 27 December 2006.









Clinical Case 3

The clinical cases published exclusively reflect the personal experience of those who presented them.

Clinical case by *Dr. Alberto Ponzoni, Dr. Elena Abati*

Clinical–medical history summary
Female, G. M., 84 years old.

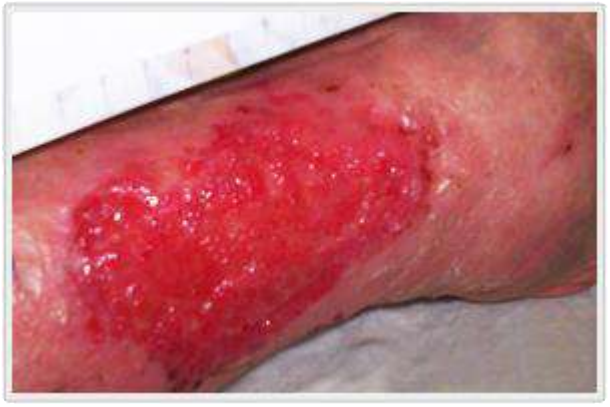
Type II diabetes mellitus undergoing insulin therapy since 1995. Bilateral saphenectomy in 1970. Previously admitted to the City Clinic from which she was discharged in February 2006 with a diagnosis of “dystrophic ulcer on the right leg, metabolic syndrome (decompensated type II diabetes mellitus, high blood pressure, abdominal obesity), PAD - lower limbs, diabetic nephropathy”.

In August 2006 re-admission at the same city clinic due to worsening of the ulcer.
Came under our observation on 12 September 2006, when the patient was admitted to our department.

Current treatment: Rapid and intermediate insulin, antihypertensive drugs (2), statin and ASA. Doppler echocardiography negative for arteriopathy.

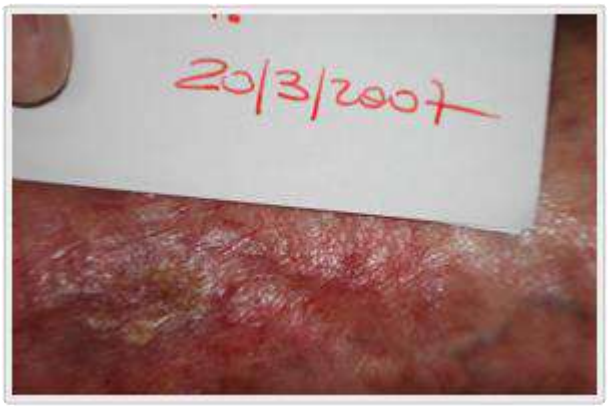
Third-degree ulcer (18 x 10 cm) present on the middle third of the right leg, partially fibrous at the base with active borders. Initially treated with a zinc oxide bandage on alternate days until 8 November 2006, when the lesion did not progress.

Lesion on 08/11/2006



The dressing regime was therefore changed and Vulnamin cream + Urgotul Ag + elastocompressive bandage were initiated.

Result: gradual control of the lesion until complete healing was achieved.



Clinical Case 4

Clinical case by *Dr. Alberto Ponzoni, Dr. Elena Abati*

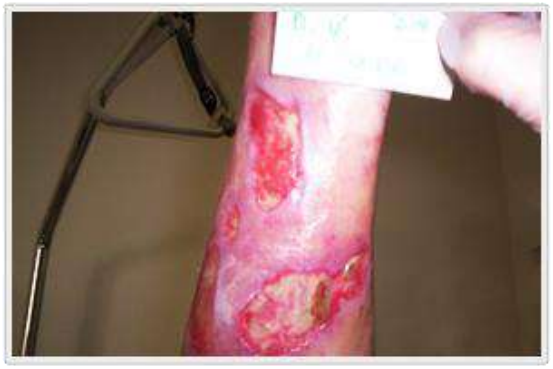
Clinical summary
Female, D. V., born on 03.05.1928. 79 years old

The patient went to the Outpatients' Department for an appointment on **15 December 2006.**
The patient was hospitalised in a city clinic for approximately one month, in an internal medicine unit.

Her past medical history was as follows: previous hysterectomy due to fibroma; NIDDM for thirty years, undergoing insulin treatment for five years; hyperlipidaemia; high blood pressure; since July 2006, diagnosis of ischemic heart disease, with subsequent performance of multiple by-passes.

Ongoing systemic therapy included: ACE inhibitor, calcium channel blocker, ASA, statins, rapid and intermediate insulin. The patent was treated locally with traditional dressing, changed on a daily basis (ointments with lytic enzymes, disinfectants).

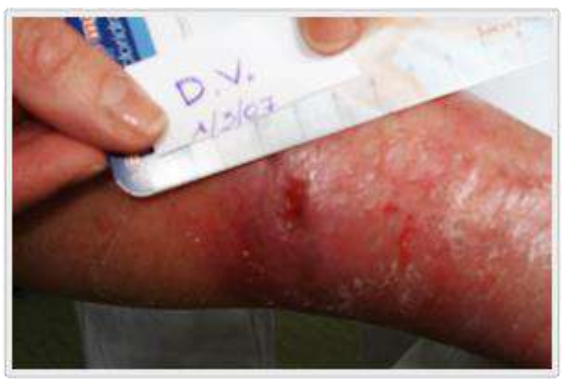
We present this case because, on **20 October 2006,** the patient reported a traumatic skin lesion on her left calf. The lesion then worsened until the situation documented by PHOTO 1.

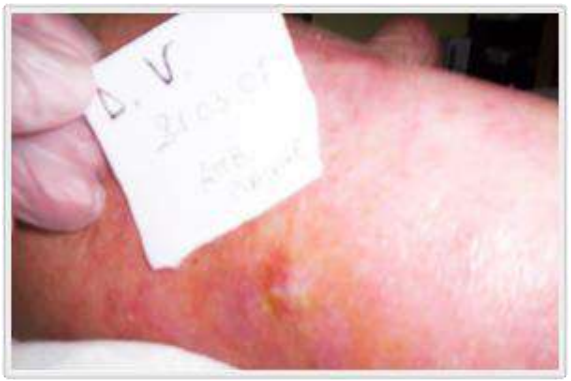


Regime: from 15/12/2006 until 01/03/2007:
Local treatment with Vulnamin cream and coverage with active carbon and silver-based dressing. The dressing was replaced every 4 days.
The treatment continued unchanged until **1 March**. PHOTO 2

As of **1 March 2007,** the patient began self-managed daily treatment, for her subsequent discharge home, which took place on **12 March 2007.**

As of **12 March 2007,** the patient performed her own dressing daily with Vulnamin cream and a non-adherent dressing.





Results: the therapeutic treatment indicated resulted in a gradual improvement of the lesion until it fully repaired and healed.
Resolution on **21 March 2007.**

Clinical Case 5

Clinical case by *Dr. Fabio Bombelli*

Pathological history

76-year-old female, diabetic and hypertensive for at least 10 years, under treatment with diuretics, digitalis and oral hypoglycaemic.
In 2000, AMI (acute myocardic infarct) relapsed and complicated by EHL (EPA embolia polmonare acuta) in 2003.

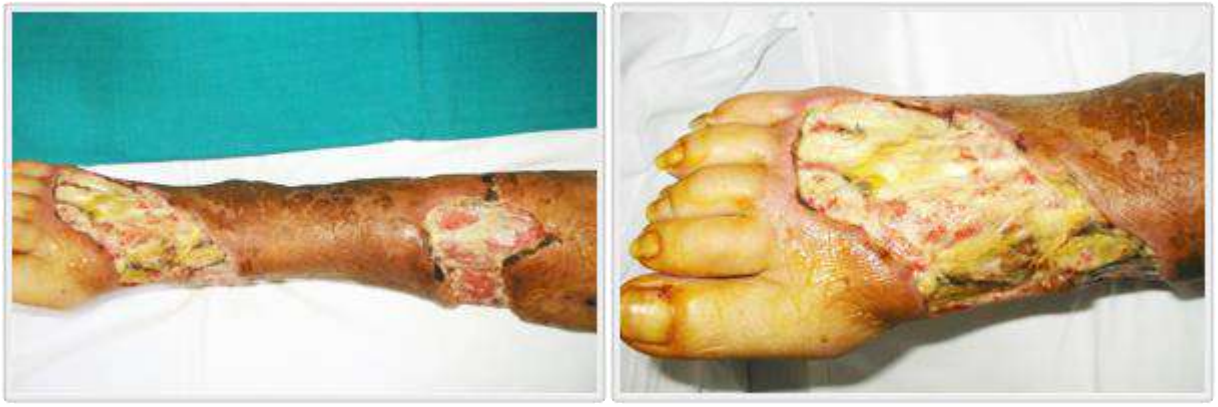
June 2006 onset of a small skin ulcer on the right leg.

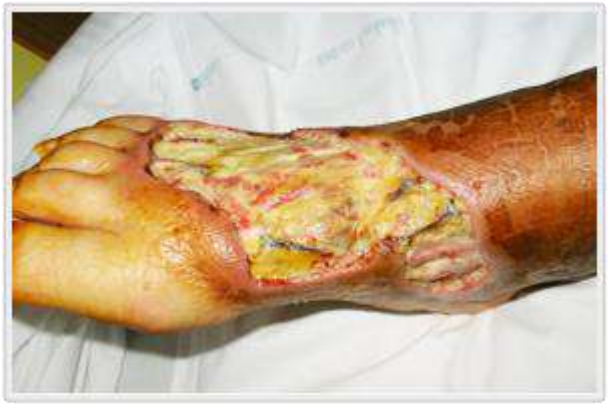
25 July 2006 admitted to Cardiology due to relapse of non-Q wave AMI, complicated by re-extension and EHL.

22 August 2006 transferred to Surgery due to septic shock with severe liver and kidney failure due to extensive ulcerations affecting the entire right leg and forefoot, with areas of necrosis and subcutaneous collections of purulent material.

6 September 2006 transferred to our rehabilitation department for clinical progress monitoring, treatment of the ulcers on the right leg and rehabilitation treatment for recovery of motor autonomy.

Admission on 6 September 2006.





Tests performed

Blood chemistry tests on admission:
Gr 3.950.000; Hb 10.4; Hct 33; MCV 85; platelets 210,000; glycated Hb 5.9%; azotaemia 152; creatinine 3.3; uricemia 10; Na 137; K 3.8, tot. prot. 6; albumin 55.8% (3.39 g/dl); tot. bilirubin 1.80; direct bilirubin 1.14; gamma-GT 215

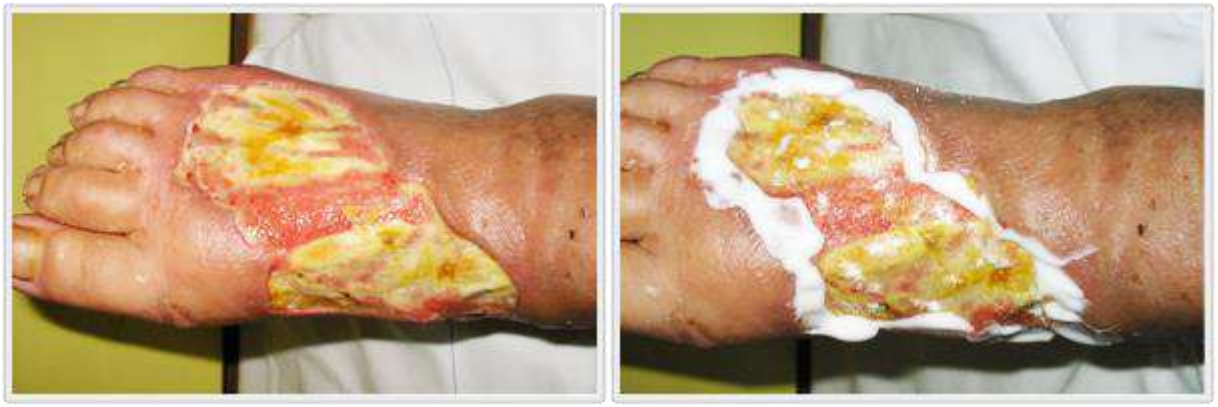
Culture on ulcers

pseudomonas aeruginosa + *acinetobacter baumannii* (17/10/06) *pseudomonas aeruginosa* (3/11/06) *Burkholderia cepacia* (02/01/07)

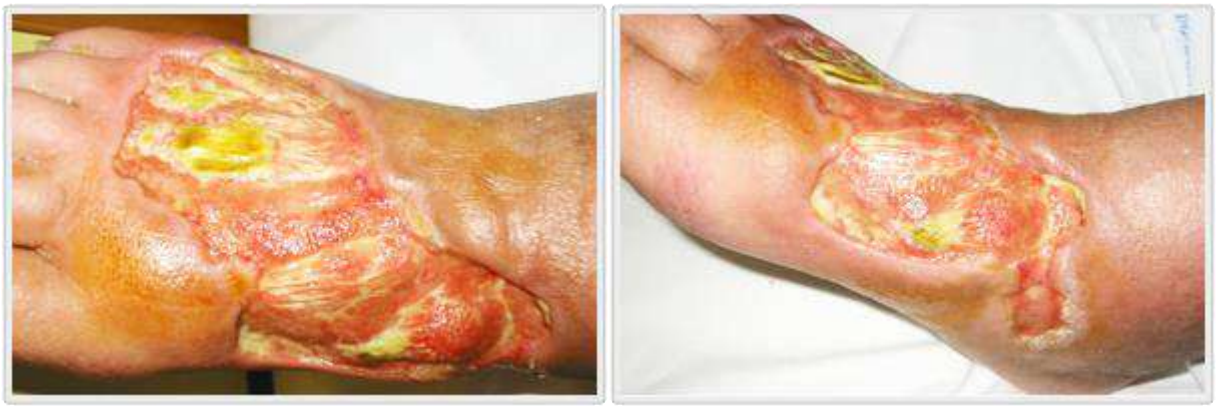
First phase regime: from 06/09/2006 until 15/10/2006
Protracted targeted antibiotic therapy, iron therapy, painkillers, review of diuretic and antidiabetic therapy. Treatment of the lesions on the back of the foot and right leg: surgical and autolytic debridement; povidone-iodine gauze. Cycle of aid-assisted walking.

Clinical progress
Correction of hypercatabolic status and stabilisation of cardiocirculatory and metabolic compensation. After 40 days, treatment of the ulcer on the back of the foot was initiated with topical amino acids (Vulnamin powder + cream on the borders) and greased gauze (daily dressing).

Also accompanied by oral therapy with Nutrakos for one month.



Situation after 2 months of treatment with Vulnamin.



Results
The ulcer at the back of the foot improved: the base was cleansed with signs of repair at the margins. The patient complained, only on the first days of the treatment, of a slight feeling of burning after dressing with Vulnamin. Afterwards, the treatment was well tolerated.

Clinical Case 6

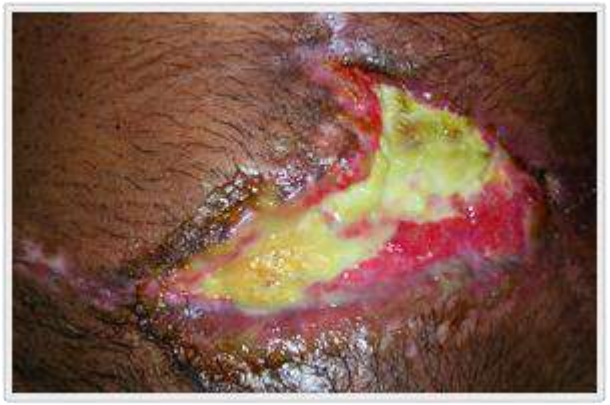
Clinical case by *Dr. Sebastiano Attardo*

Medical history

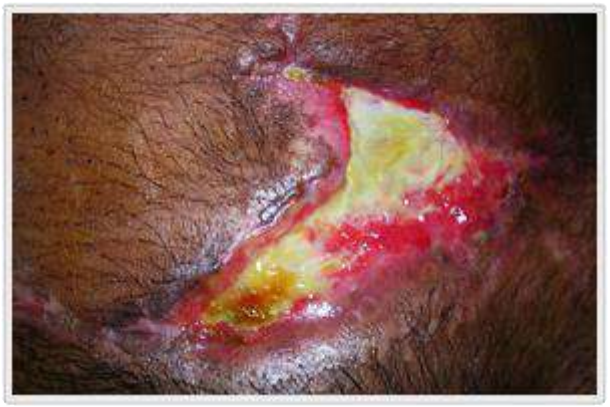
Male, K. P., 32 years old, Pakistani. From the medical history carried out in the emergency department due to a serious car accident, there were no previous diseases worth noting. No current pharmacological treatment.

The patient was admitted to our hospital department on **19.10.2006** and was operated urgently due to a wound penetrating the abdomen with a large cutaneous flap which subsequently became partially necrotic. The lesions were secondary to a major accident.
The treatment, initiated on **17 December 2006**, was initially given with Vulnamin powder daily for 15 days. This was continued for another 15 days by combined treatment with Vulnamin cream + powder with dressings on alternate days. For the remaining period, treatment was given with Vulnamin cream and the dressing were performed every three days. During all phases, the wound was initially irrigated and cleansed with saline solution and the surrounding area was disinfected with Betadine and, after applying Vulnamin, covered with a greased gauze.

17 December 2006



23 December 2006



24 January 2007

23 February 2007

Results: the photographic sequence shows the favourable course of the healing process over approximately 2 months.

Clinical Case 7

Clinical case by *Dr. Arnaldo Bombaglio, Nursing Home*

Medical history

84-year-old guest with severe vascular dementia and anxious-depressive disorder, significant cognitive impairment and disorientation. Severe osteoporosis with multiple vertebral collapses, stiffness and somatic pain, reduced visual acuity and bilateral hearing loss. COPD. Walks a few steps, with assistance only. Double incontinence. After a short period of bed rest due to left bronchopneumonia, onset of pressure ulcer on the right heel. Stage III-IV.

Treatment of lesions

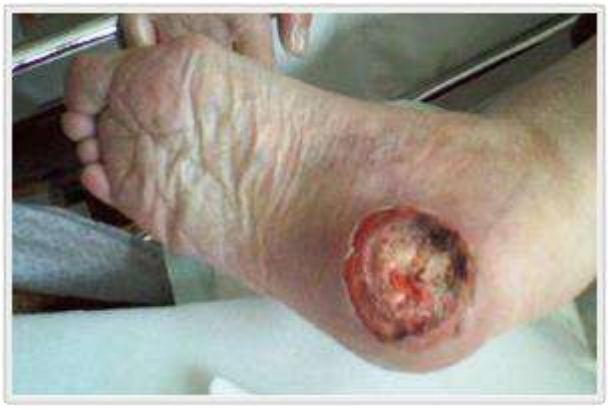
19.03.07

Surgical lavage, cleansing with hydrogen peroxide, lavage with saline solution, dressing with collagenase + chloramphenicol and occlusion with Ligasano.

26.03.07

Surgical lavage, dressing as above. Onset of bilateral peripheral oedema, well controlled with gradual elastocompressive bandage.

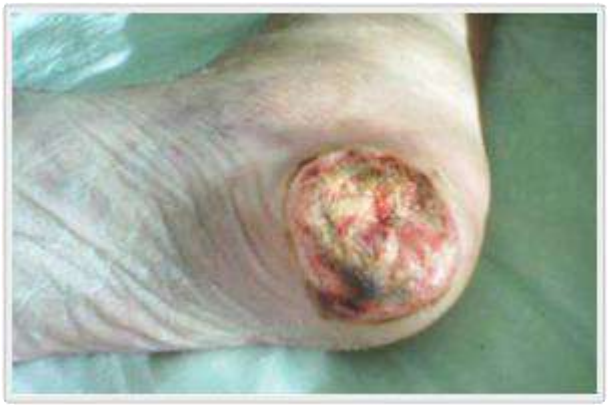
Status of the heel lesion on 26.03.



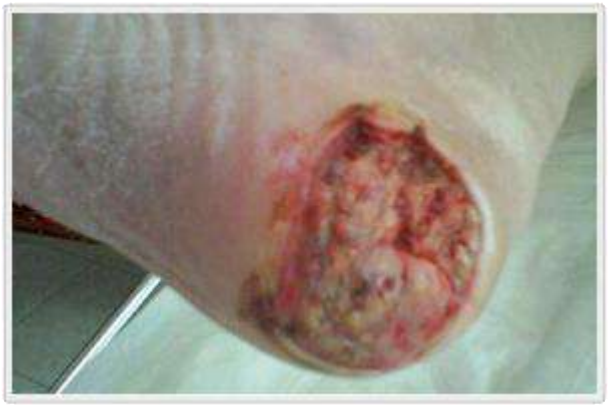
05.04.2007

Dressing initiated with Vulnamin. Application of Vulnamin powder initiated. Secondary dressing with Ligasano.

Status of the lesion on 05.04. Treatment with Vulnamin initiated.



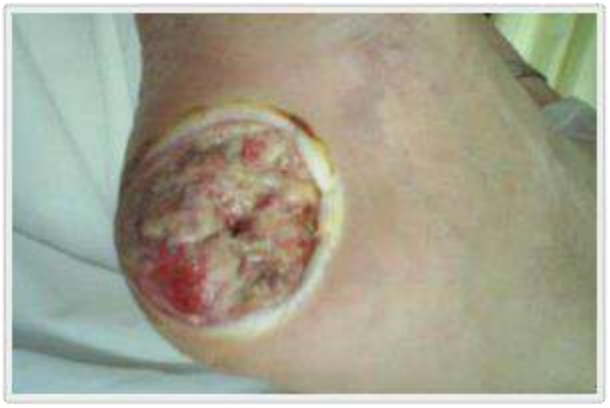
Status of the lesion on 12.04.



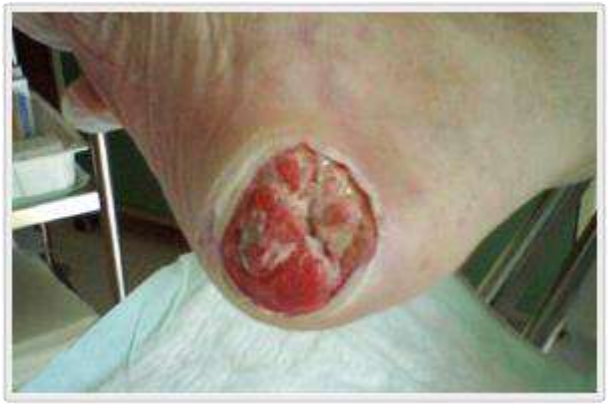
17.04.2007
Lavage with saline solution and application of Vulnamin powder. Secondary dressing with LIGASANO.

27.04.2007
Significant growth of granulation tissue.

Status of the lesion on 17.04.

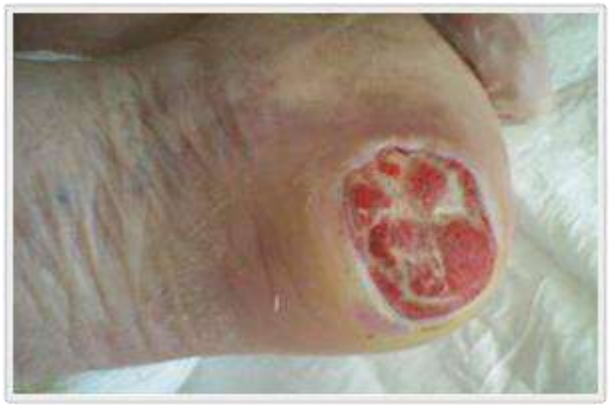


Status of the lesion on 27.04.

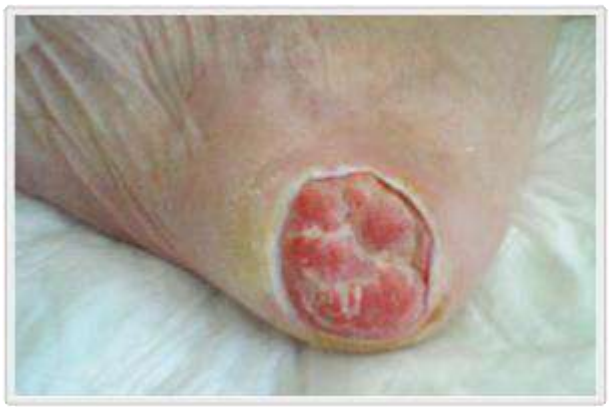


07.05.2007
Vulnamin tablets replaced with Vulnamin cream.

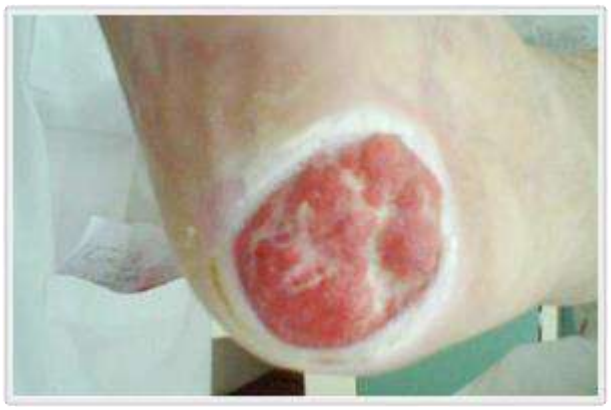
Status of the lesion on 03.05.



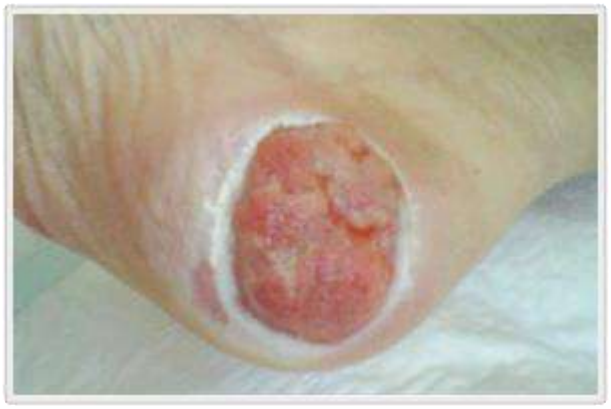
Status of the lesion on 07.05.



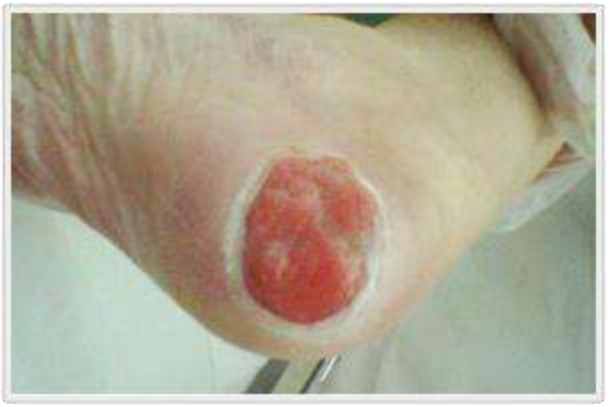
Status of the lesion on 11.05.



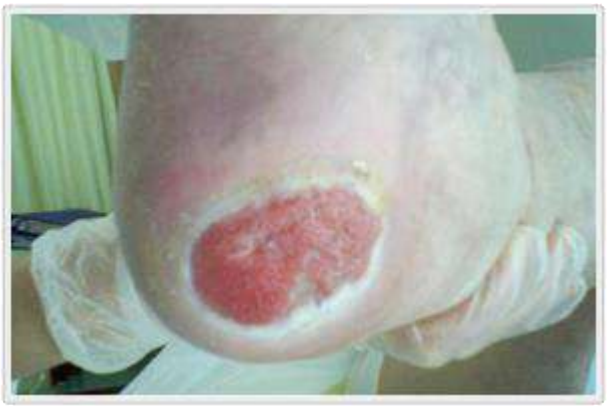
Status of the lesion on 16.05.



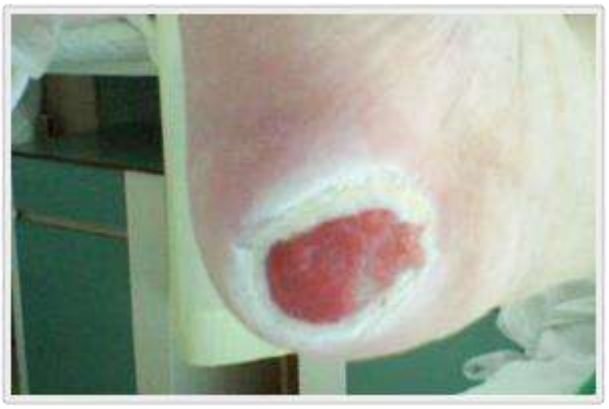
Status of the lesion on 23.05.



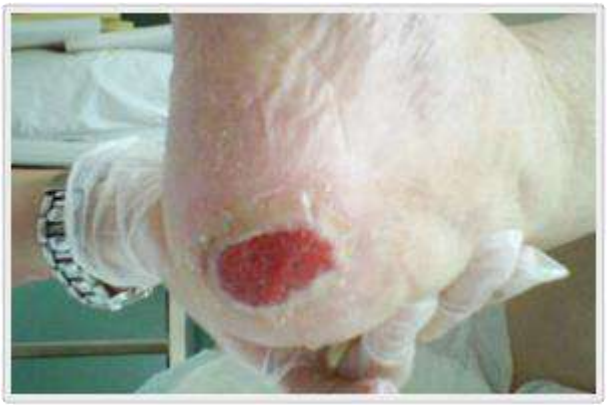
Status of the lesion on 30.05.



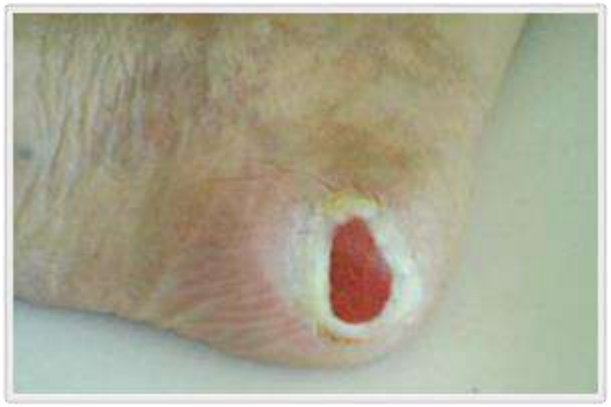
Status of the lesion on 06.06.



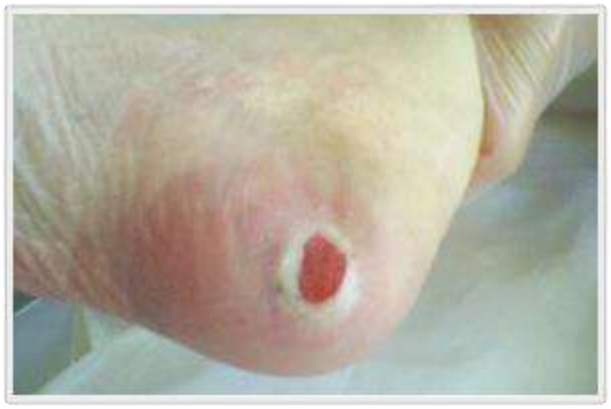
Status of the lesion on 12.06.



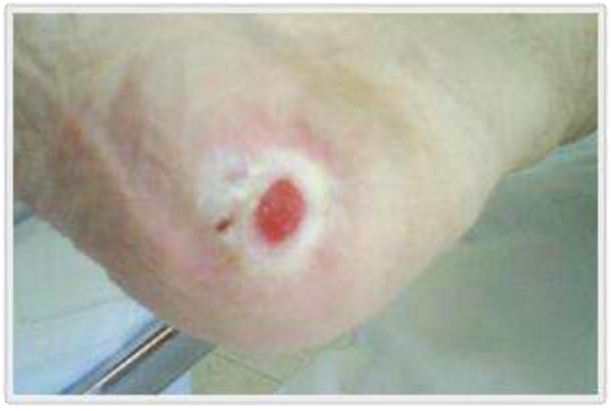
Status of the lesion on 19.06.



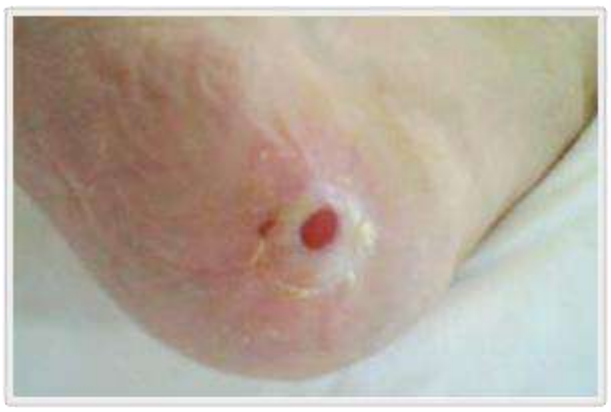
Status of the lesion on 06.07.



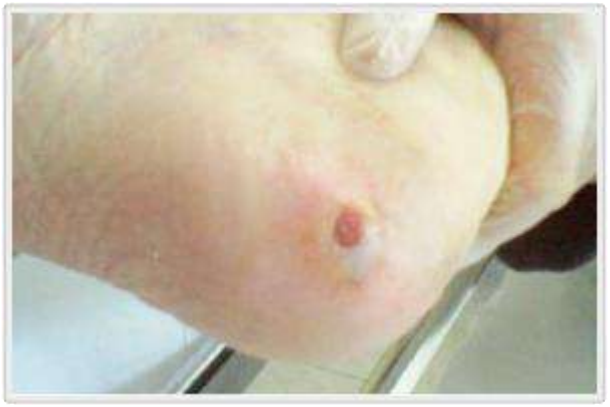
Status of the lesion on 11.07.



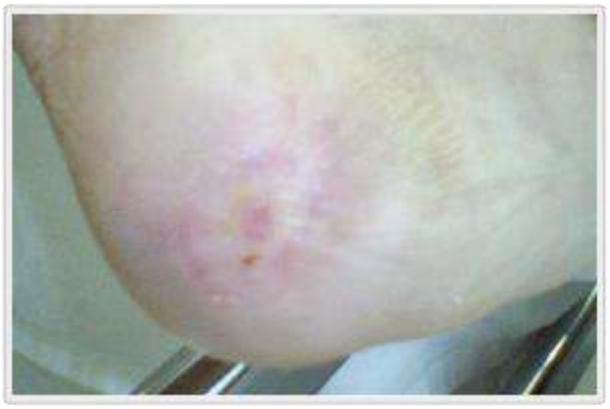
Status of the lesion on 18.07.



Status of the lesion on 24.07.



Status of the lesion on 09.08.



Result: during the use of Vulnamin powder, a substantial control of the lesion was observed which, although not changing in size, revealed a significant growth in granulation tissue. After treatment with Vulnamin cream, complete recovery of the ulcer was observed, with the start of a re-epithelialisation process.

Clinical Case 8

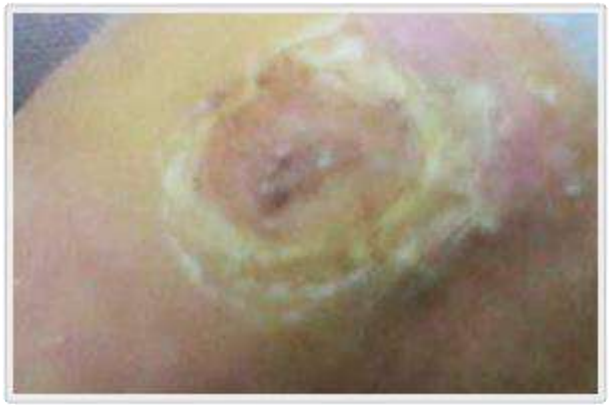
Clinical case by Nurse Eleonora Facchini

Medical history
80-year-old patient with Alzheimer's disease, currently bed-bound due to fever, diarrhoea, general deterioration and decubitus lesions on various parts of the body, namely, left and right heel, right trochanter, sacrum and gluteus minimus.

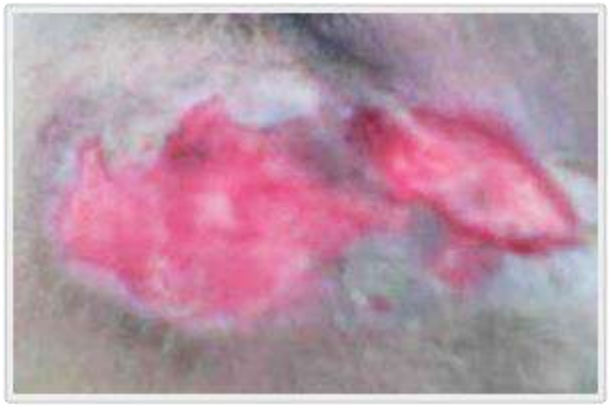
On admission, the patient presented these lesions

Status of the lesion on left heel.

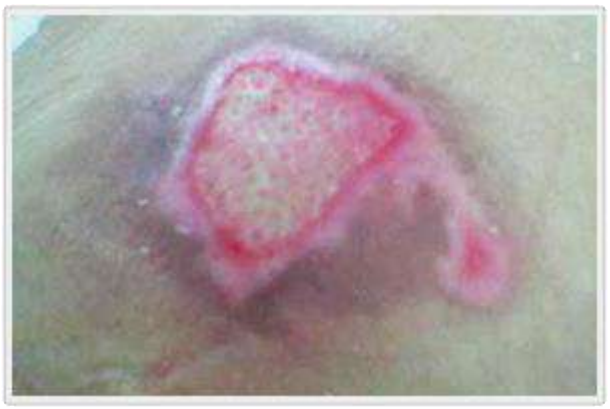
Status of the lesion on the right heel.



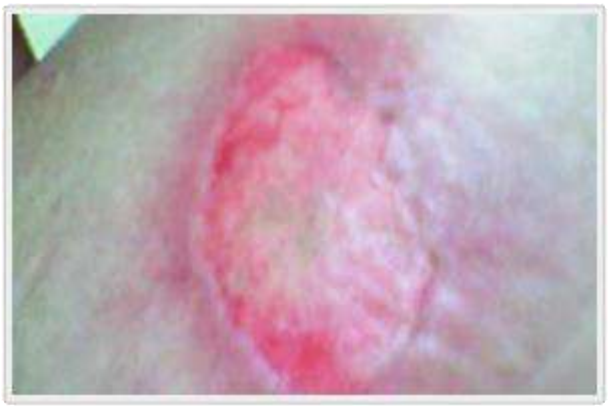
Status of the lesion on the sacrum.



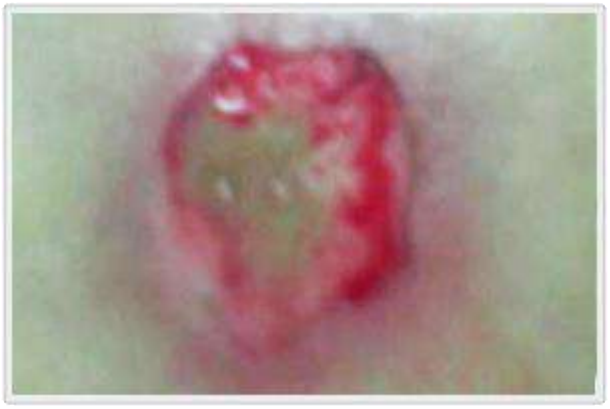
Status of the lesion on the right trochanter.



Status of the left knee.



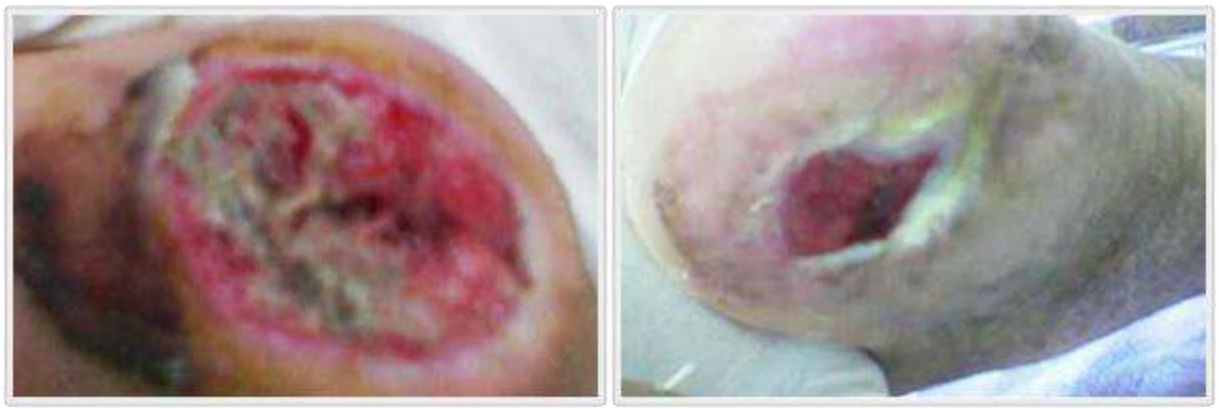
Status of the right knee.



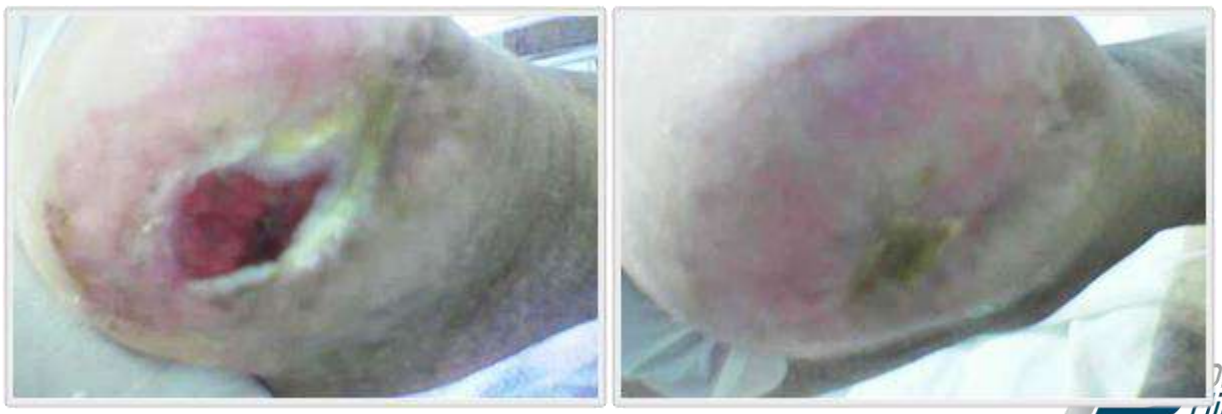
Treatment of lesions
Firstly, a bladder catheter was placed to prevent the continuous maceration process of the tissues. Nursing assessment of the lesions using the Norton Scale = 8. An anti-decubitus mattress (Alphatrancell) was placed whilst awaiting an alternating air release mattress (NimbusIII). During hospitalisation, specific antibiotic therapy was initiated; adequate hydration and nutrition was established; the patient began having a regular bowel movement, with normal stool formation and also subsequent improvement of the lesions.

Debridement performed on the left heel, where there was a presence of fibrin and necrotic tissue. Treatment initiated with Vulnamin powder and secondary dressing with hydrocolloid plaster.

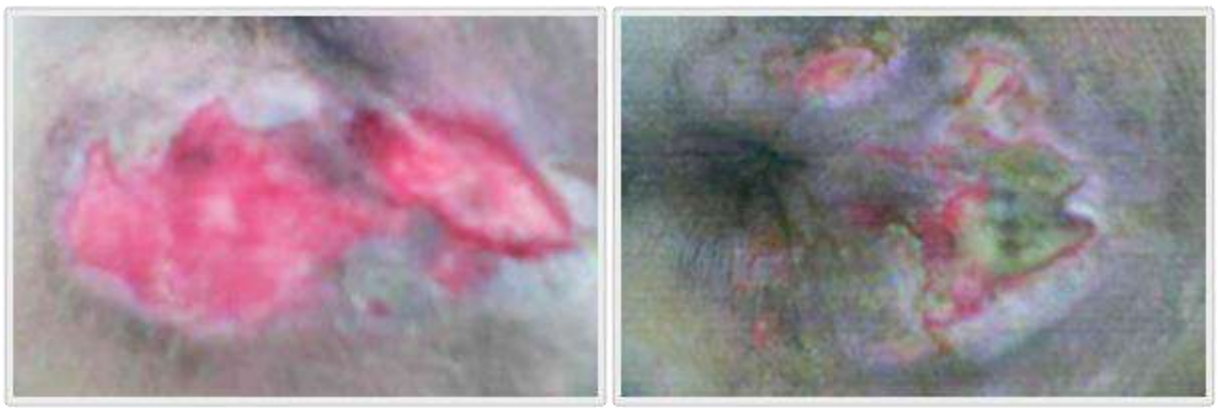
Status of the lesion after 1 month of treatment.

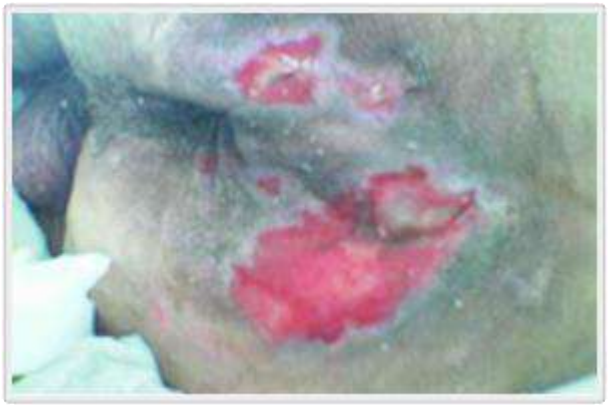


At the end of the treatment, the heel looked like this (1.5 months later).



Sacral lesions

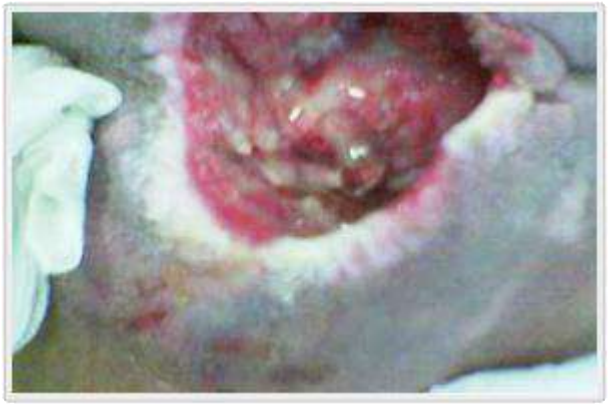




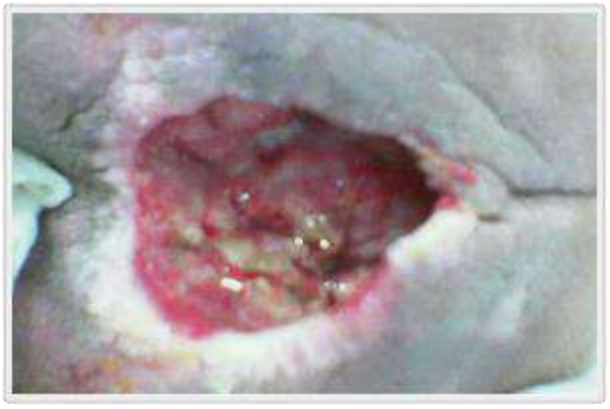
Treatment of lesions

After debridement (the lesion is 5-6 cm long and 3-4 cm deep), the lesion secreted a lot of exudate and treatment with Vulnamin powder and hydrophobic polyurethane foam was initiated.

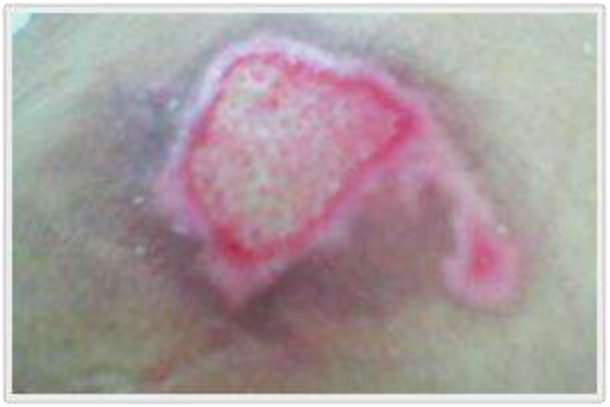
After a few days, an improvement of the sacrum began to be noticed.



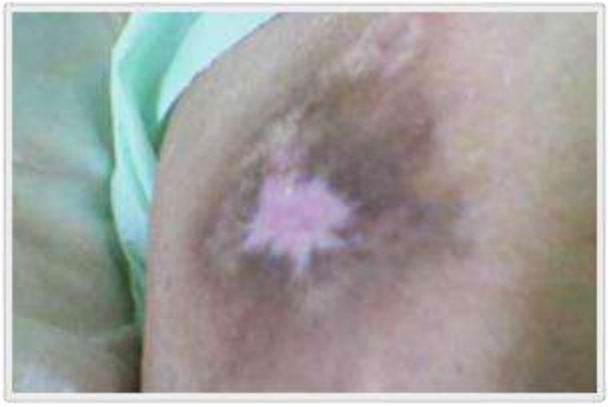
Vulnamin A+B tablets were inserted into the lesion and a polyurethane sponge was placed; closed with transparent dressing.



Lesion of the trochanter

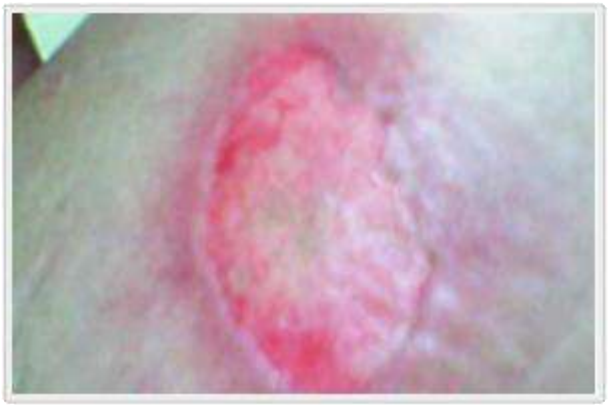


Treatment of lesions
After treatment with Vulnamin cream + extra-fine hydrocolloid plaster.

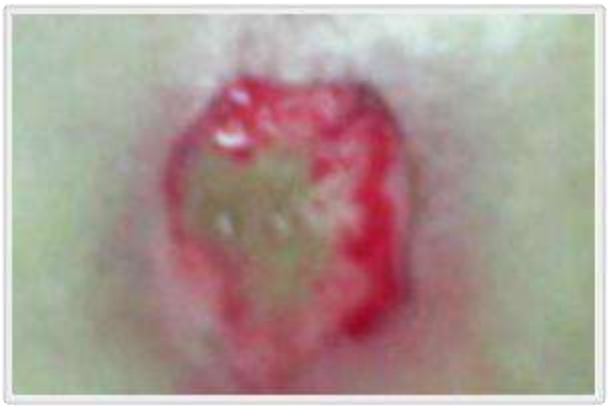


Treatment of the knee

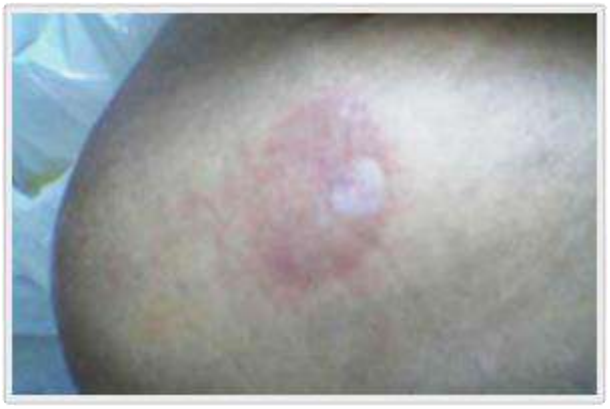
Status of the lesion on the left knee.



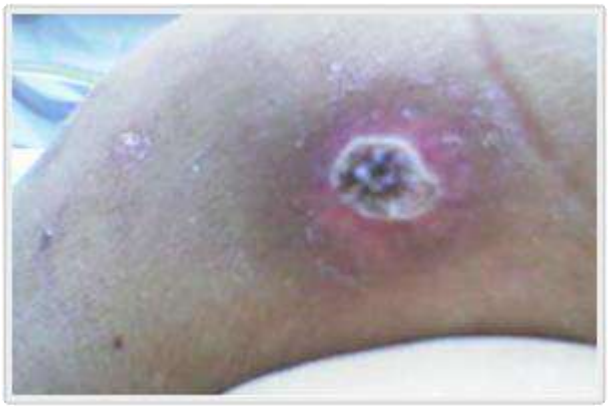
Status of the lesion on the right knee.



Status of the lesion on the left knee: after 7 days of treatment with Vulnamin cream + polyurethane foam.



Status of the lesion on the left knee: after 7 days of treatment with Vulnamin cream + polyurethane foam.



Results: after 30 days and 45 days (end of treatment), net improvement of the lesions with reduced sizes and reduction in exudative activity. The improvements are clearly noticeable on the heel, trochanter and knees; the lesion on the sacrum is also more controlled at the end of the treatment.

Clinical Case 9

Clinical case by *Nurse Eleonora Facchini*, **expert nurse in wound care.**

Medical history
Male, G.U., year of birth: 1928.

Pathology
Outcomes of stroke.

1998
Admitted to Medical Hospital Department. Discharged in agonic state with multiple pressure lesions (more than 10), stage II-IV and necrotic (mainly on the sacrum and trochanters) . Home treatment initiated (Wound Care and Physiokinetic Therapy).

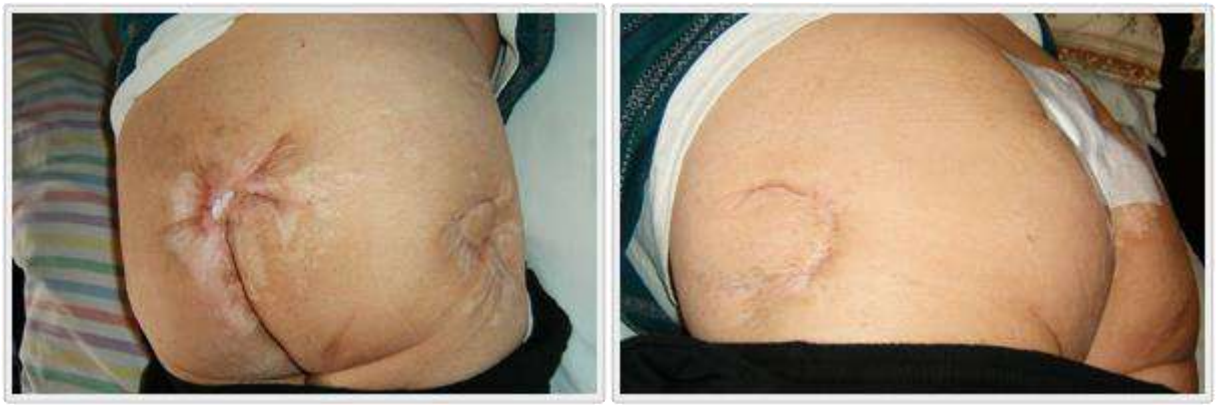
1999
Admitted to the LDPA department (6 months); NA treatment (PEG).

2000
Plastic surgery procedures (trochanters); early discharge.

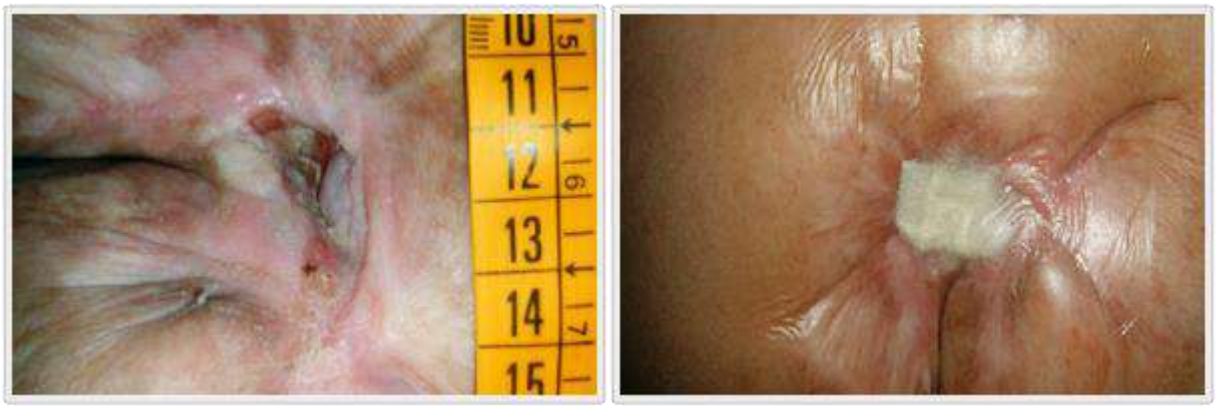
2002
Full psychophysical recovery.

2002 - 2006
Incomplete healing of the sacral lesion, exudative ulcer, also later malodorous. Microbiological and cytological test.

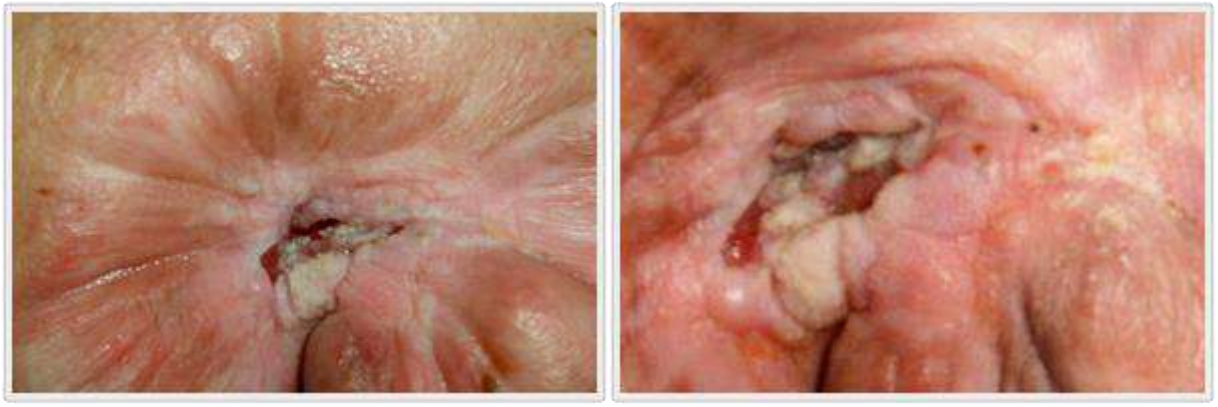
2006 - 2008
Resumption of home treatments on ulcer (in Italy and the UK).



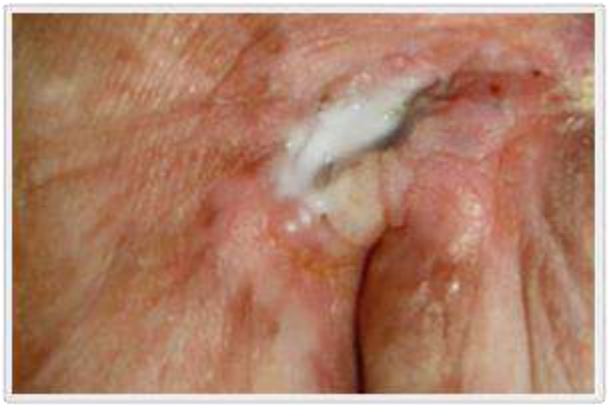
21 June 2007
Hydrofibre Ag + Film Barrier + Semi-Permeable or Hydrocolloid Film.



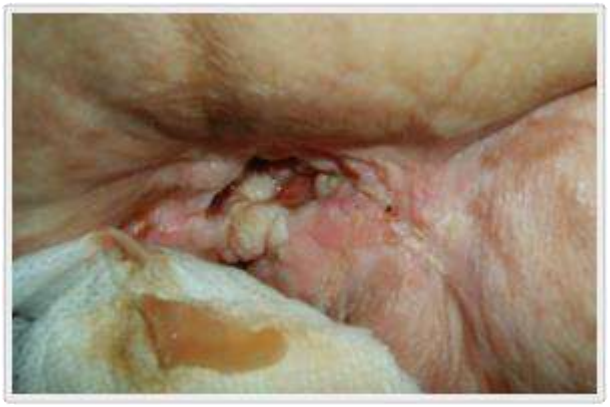
12 August 2007
End of use of Hydrofibre Ag.



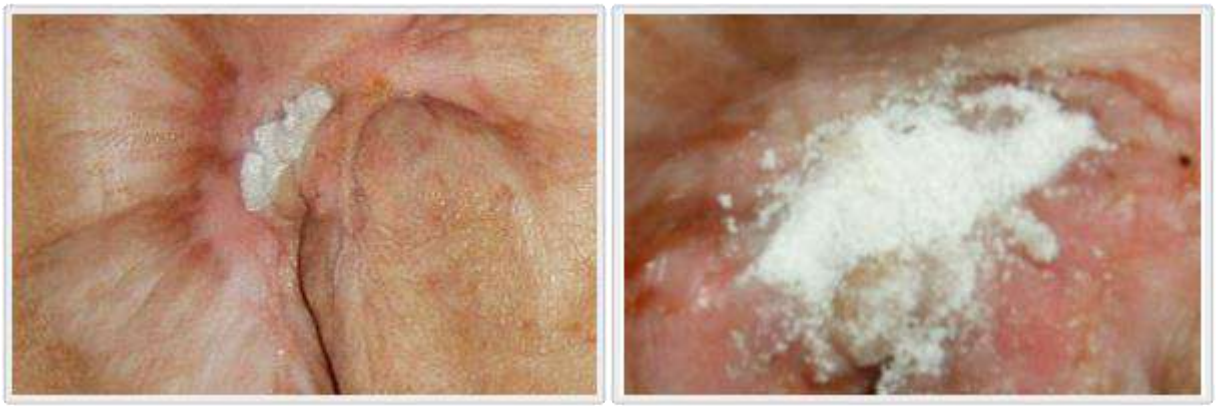
12 August 2007
Initiation of Vulnamin cream + film barrier + semi-permeable film. Initiation of Nutrakos.



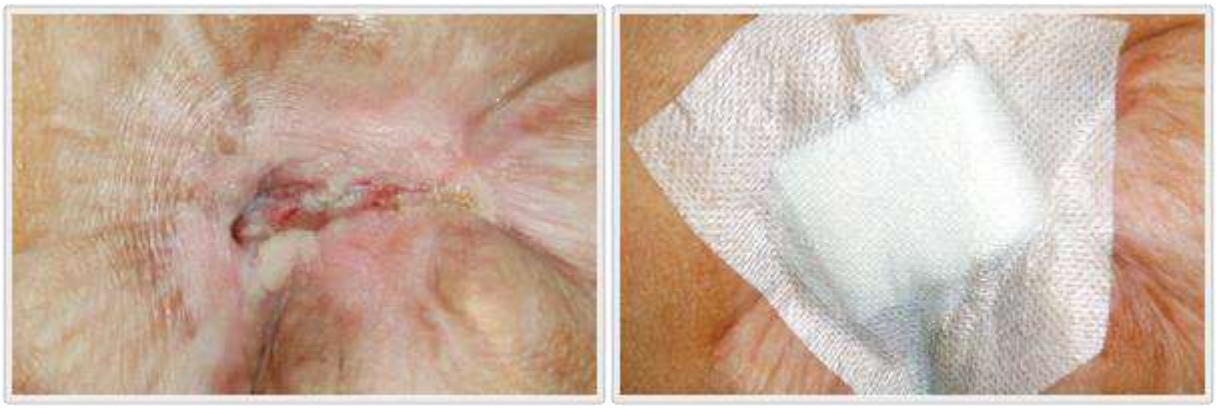
19 October 2007
Accidental fall from the stairs. Admitted to the emergency department. Bruises; bed rest.



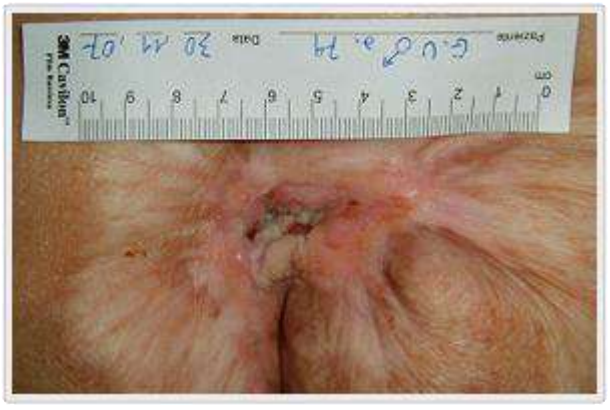
24 October 2007
Initiation of Vulnamin powder + Nutrakos



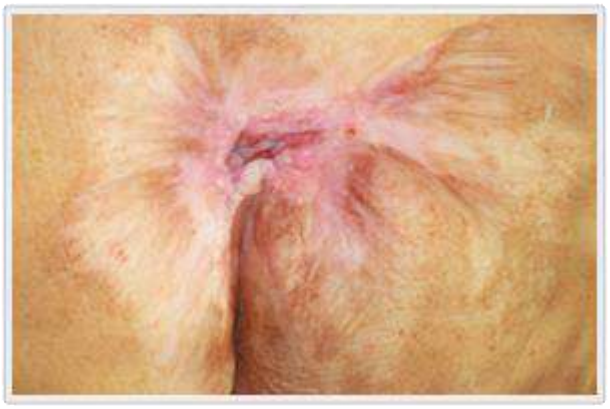
04 November 2007
Continuation of treatment with Vulnamin powder + Nutrakos



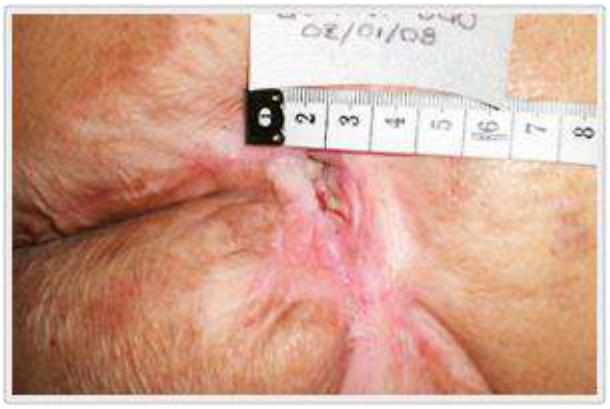
30 November 2007
Patient mainly on bed rest. Vulnamin powder + Nutrakos

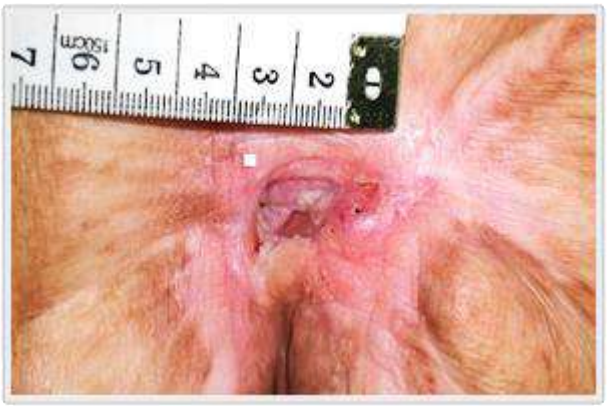


13 December 2007
Vulnamin powder + Nutrakos. Non-exudative lesion; transferred to the UK.



08 January 2008
(residing in the UK): communications by email and telephone. Continues with Vulnamin powder + Nutrakos





Clinical Case 10

Clinical case by *Dr Marco Barone, I.P. Vandelli Luisa, I.P. Fraley Patrizia, I.G. Mattiazzi Anna*

Summary of clinical-medical history
Female, D. R., 59 years old. Severe chronic venous insufficiency with extensive bilateral varicose disease. Perimalleolar bilateral circular trophic ulcers; hyposphygmic tibial pulses. Came under our observation on 13/09/2007.

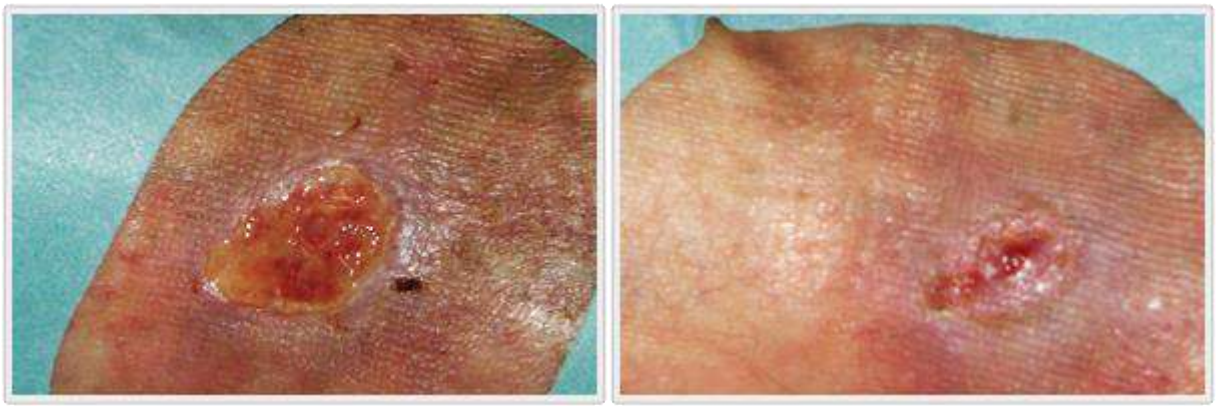
Current treatment:
Betadine patches, painkillers, anti-inflammatories. Doppler echocardiography negative for arteriopathy.
On the outer middle third of the right leg, presence of a fibrinous third-degree ulcer (4x3 cm). Initially treated with noruxol, hydrocolloid plaster and elastocompressive bandage until 15/10/2007, when the lesion no longer progressed.

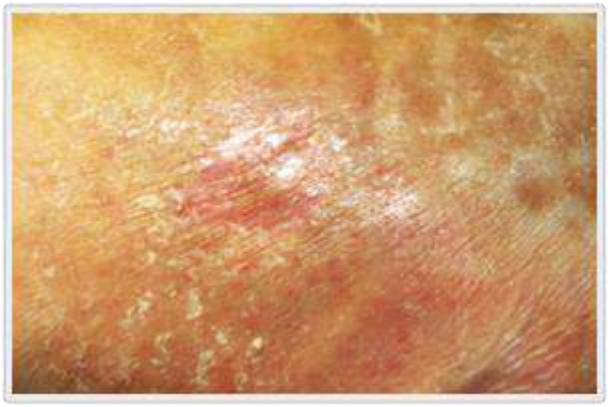
Regime used:
Wound swab negative for infections. Vulnamin cream + adaptic + elastocompressive bandage initiated.

Vulnamin treatment initiated **15/10/2007.**

Results: from the start of treatment with Vulnamin cream, the lesion on the outer middle third of the right leg tended to improve.

COMPLETE HEALING 27/11/2007.



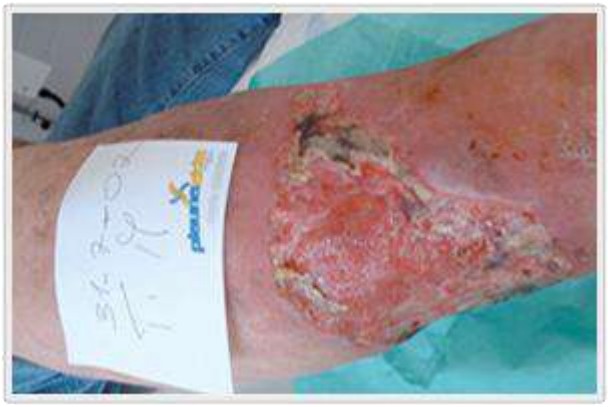


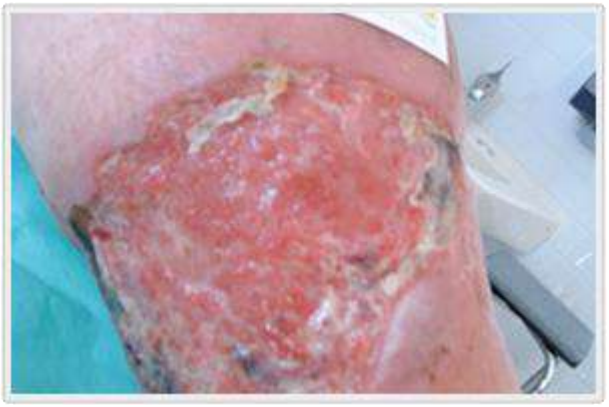
Clinical Case 11

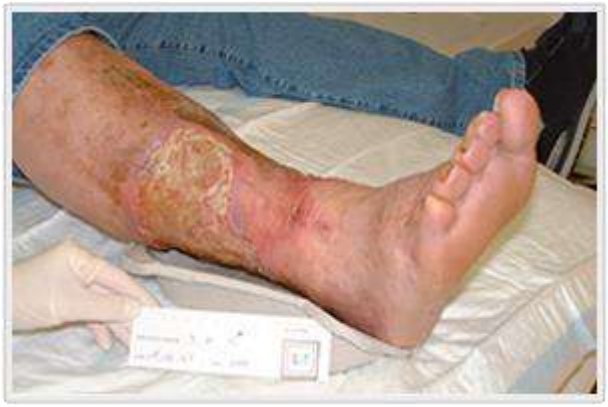
Clinical case by *Dr. E. Manara*

Medical history
Male, 59 years old, concurrent diseases: Insulin-dependent diabetes mellitus for 10 years. Obesity (105 kg). High blood pressure for 5-6 years.
• Specific clinical condition: Extensive (10.2 x 8.5 cm) ulcer on the right leg; came under observation at out centre at the end of July 2007, already present from two months, no trauma or other evident causes. The lesion appears covered by partially colliquative necrotic tissue, with noticeable signs of infection and small satellite ulcers.

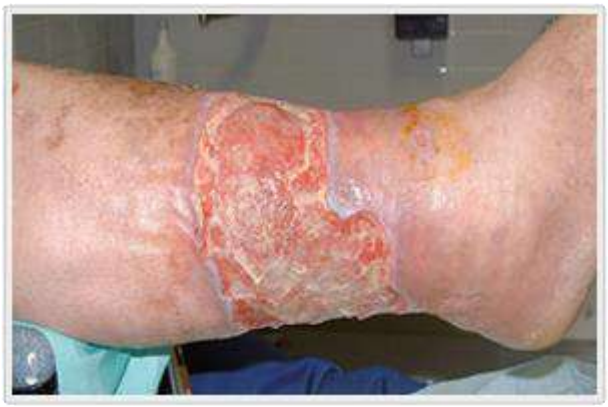
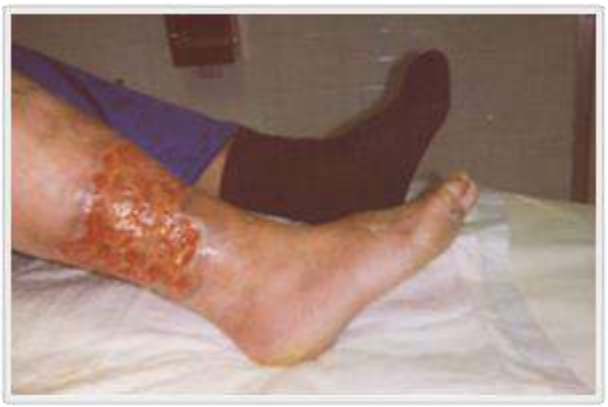
First phase treatment regime:
The patient came to the Centre under 6 days of targeted antibiotic therapy (Amoxicillin + clavulanic acid 1g x 2/day), advised by the treating physician. Surgical curettage and dressing (Collagenase) were performed. On subsequent follow-ups (approximately every 15 days) the base of the lesion appeared increasingly clean, but the sizes of the lesion had increased (15.0 x 8.0 cm). The dressings, no longer daily, were based on the use of Hydrogel and greased gauzes to counteract the tendency towards dehydration of the granulation tissue (the patient never tolerated polyurethane foam). At the beginning of October, the patient reported, in addition to the considerable difficulties of home management, a significant increase in painful symptoms and fever. The lesion was highly exudative. He was admitted for hospitalisation. On admission, the sizes of the primary ulcer had also increased: 18.5 x 11 cm (medial perimalleolar satellite: 3.5 x 2.5 cm). The base was fibrous, highly exudative. The perilesional skin was macerated.





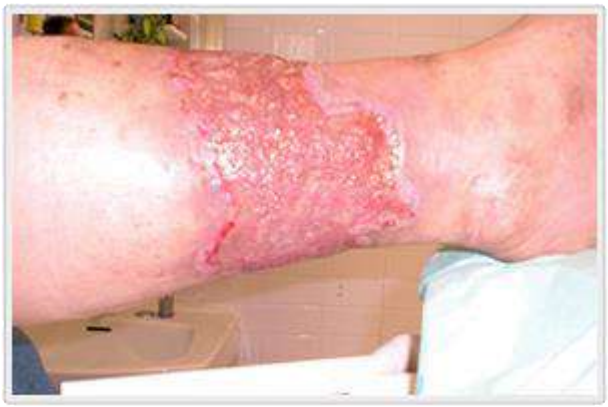
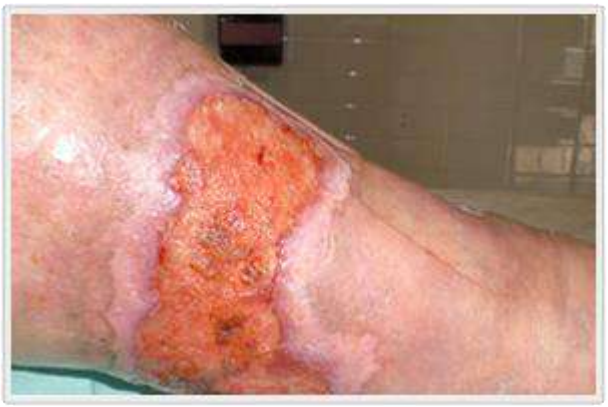


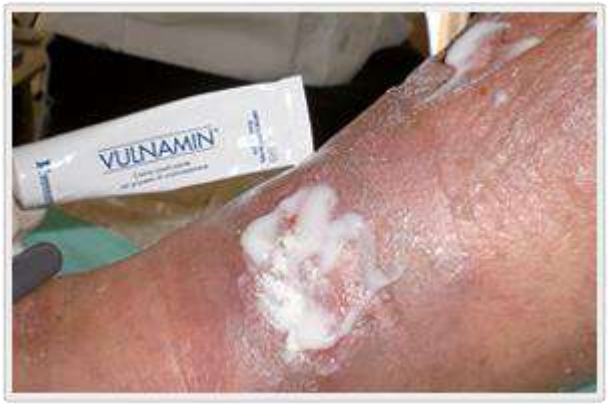
Second phase regime (whilst hospitalised):
From mid-October until approximately mid-November, targeted antibiotic therapy with Levofloxacin 500 mg x 2/day x orally for 10 days. Meropenem 1 g x 3/day IV for 10 days. Daily dressings (even twice a day), after both mechanical and surgical cleansing, with absorbing and disinfecting properties: Alginates, Ag+ (combined treatment with Magnetotherapy twice a day). Hyalomatrix graft, (tissue engineering) left in place for 7 days, renewing only the secondary dressing. After 7 days, new dermal replacement implant, removed, however, after just 2 days, due to recurrence of pain and resumption of exudation, even though the base of the lesion showed abundant granulation tissue and healthy borders; follow-up swab negative. 17/11/2007 Discharged. At home, dressings with silver and absorbing properties.

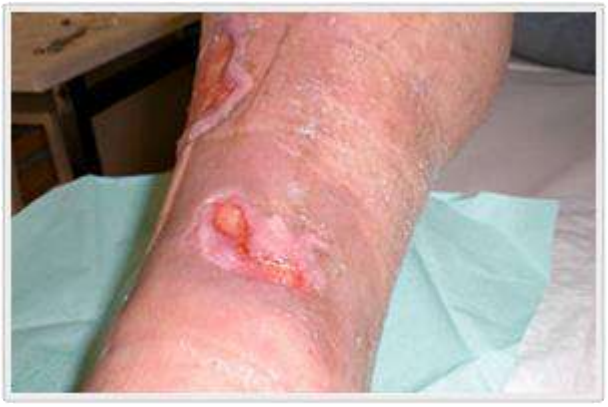



RESULTS
Gradual improvement, control of exudation, reduced painful symptoms and onset of abundant granulation tissue. Well-cleansed lesion, no signs of perilesional inflammation, no malodour. At home, dressings with silver and absorbing properties.

Third phase regime:
Mid-February 2008: TREATMENT INITIATED WITH Vulnamin
Protracted targeted antibiotic therapy, iron therapy, painkillers, review of diuretic therapy and, at the next outpatient follow-up, the lesion was still kept well cleansed and healthy. Vulnamin cream and powder were applied, renewed every 3-4 days.
Net improvement of both lesions, with marked activity of the borders and subsequent gradual reduction of their sizes.





Clinical Case 12

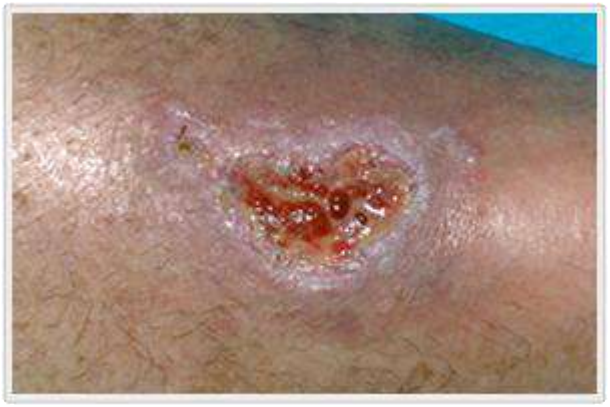
Clinical case by *Dr. A. Rinaldi*

Medical history
50-year-old male, concomitant diseases: High blood pressure. Specific clinical condition: Post-traumatic pretibial ulcer.

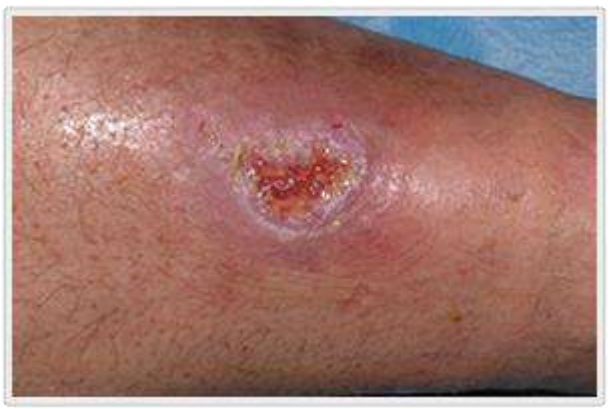
First phase treatment regime:
First phase regime: From 2 February until 29 March, twice-weekly dressings, for a total of 10 applications, with:
• perilesional disinfection with Betadine.
• application of a gauze soaked in Prontosan for 20 minutes.
• lavage with Folkman's spoon.
• cleansing with Saline Solution.
• application of Vulnamin

Result
Gradual containment of the lesion until full repair and healing.

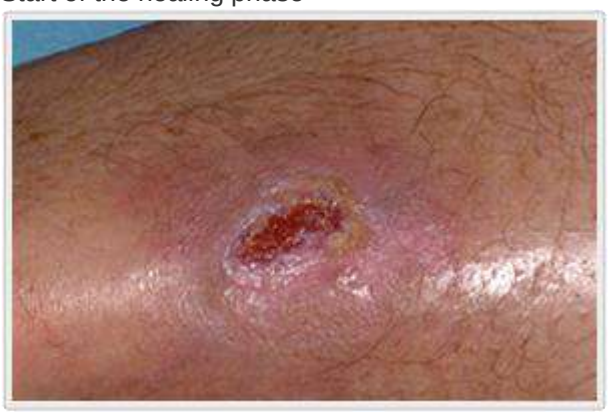
Lesion at the start of treatment



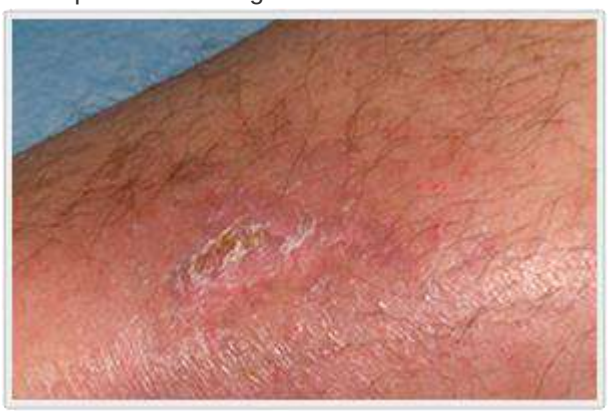
Reduced size of the lesion



Start of the healing phase



Full repair and healing



The clinical cases published exclusively reflect the personal experience of those who presented them