LETTERS TO THE EDITOR

Abdominal splenosis: the importance of the medical history

Esplenosis abdominal: la importancia de la historia clínica

To the editor:

Splenosis is the auto-implantation of splenic tissue in the peritoneum, serous or more rarely in organs after a trauma with splenic rupture or after a surgical procedure of the spleen[1]. The implants are usually multiple and although they are usually asymptomatic and diagnosed incidentally in imaging studies, they can sometimes simulate appendiceal, gynecological, subocclusive or a tumour syndrome, depending on the implant site[2]. Sometimes, this finding can lead to confusion and lead to malignancy[3] if the history of splenectomy (partial or total) is not taken into account, which can lead to the practice of invasive techniques, often unnecessary. The case we present illustrates this situation.

A 53-year-old woman with a history of chronic renal failure waiting for a kidney transplant. The patient reported a history of splenectomy due to a traffic accident 20 years ago. He went to the emergency department for abdominal pain of three days of evolution and palpation of a lump at the level of the umbilicus. He did not report any other symptomatology. On physical examination, I was conscious, oriented, well hydrated and perfused. Cardiopulmonary auscultation was normal. The abdomen was distended, with normal bowel sounds and on palpation the presence of a soft nodule, about 3 cm in size, paraumbilical was confirmed. The blood count and biochemistry were normal, except for the known chronic renal failure. Abdominal radiography showed no interesting findings. An ultrasound was performed that identified a 3 cm paraumbilical solid nodule with a superficial location. Computed tomography (CT) with intravenous contrast was performed, in which several nodules were visualized in the peritoneum, the largest of 3 cm paraumbilical, corresponding to the palpable nodule and visible on ultrasound. A remnant spleen of small size was also evident. Given the findings and the splenic traumatic antecedent, the possibility of splenosis was posed, without being able to rule out the neoplastic origin. The patient was referred for study and confirmed the diagnostic suspicion by means of a scan with denatured red cells marked with technetium-99 m. This test confirmed the presence of splenic tissue accumulations dispersed by the peritoneum (Figure 1).

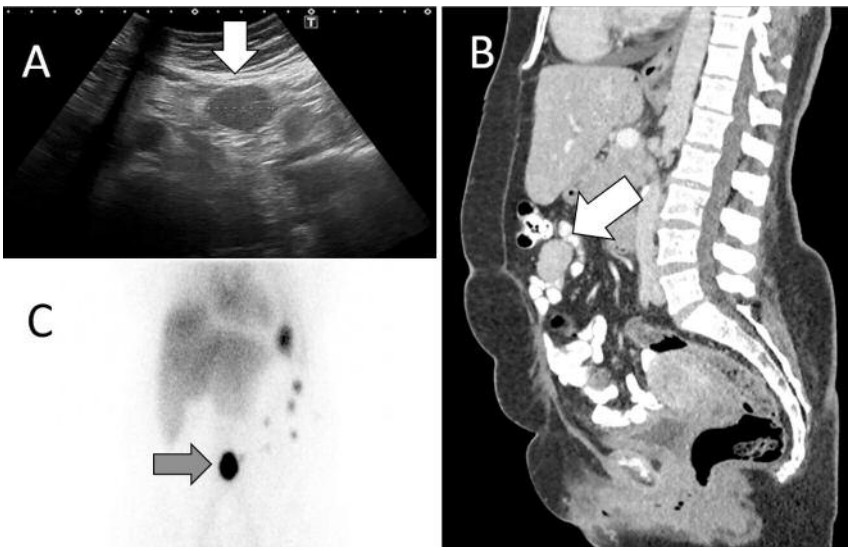

Figure 1. A) Abdominal ultrasound, showing a solid nodule (arrow). B) CT with contrast showing the nodule in the peritoneum, at the level of the navel (arrow). C) Gammagraphy with denatured red cells marked with technetium-99, confirming the existence of several splenic tissue foci dispersed by the abdominal peritoneum, the largest paraumbilical (arrow).

The presence of palpable nodules in the abdominal wall, together with a history of partial or total splenectomy, should lead to suspicion of splenosis. The differential diagnosis includes malignancy and radiological and nuclear medicine tests[4] should be performed to confirm the diagnosis and rule out other entities[5]. We want to highlight the importance of the patient's background to help diagnose suspicion and avoid unnecessary biopsies and surgeries to the patient.

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Mortality and the usefulness of trauma severity scales in seriously injured patients in a hospital emergency department

Mortalidad y análisis de las escalas de gravedad en el paciente con traumatismo grave atendido en un servicio de urgencias hospitalario

To the editor:

Severe traumatic pathology is a very relevant entity due to its high mortality. It is only surpassed by cancer and cardiovascular and respiratory diseases and is currently the leading cause of death in children under 40 years of age[1]. It has been shown that time is a decisive factor in the prognosis of these patients. Assistance is necessary precocious and adequate prehospital care, quality assessment and correct coordination with the emergency department and hospital specialties[2,3]. In this context it is understood that determining the early factors that influence the prognosis of polytraumatic patients is of vital importance in order to reduce mortality due to this cause. In recent years, different scales have been developed that attempt to assess the risks associated with the mortality of these patients, which are easy to perform in the first medical assistance[4]. This work assesses the mortality of severe polytraumatic patients (SPP) seen in a hospital emergency department (HED) and evaluates the usefulness of the Glasgow Age Blood Pressure (GAP), Revised Trauma Score (RTS) and Glasgow Come Score (physiological scales). (GCS) in the prognostic assessment of these patients upon their arrival at the hospital.

A retrospective descriptive study was conducted in which patients were included over 14 years of age served in the HED of the Río Hortega University Hospital in Valladolid and admitted to the intensive care unit (ICU) in 2015 with a diagnosis of SPP. The dependent variable was in-hospital mortality (HM); the independent variables were age, sex, scales of severity (GAP, RTS and GCS) and variables related to SPP (mechanism of injury). The comparison of quantitative variables was reviewed with the T-student test, and the comparison of the qualitative ones by means of the chi-squared test. The area under the curve (AUC) the receiver operating characteristic (ROC) of each of the analyzed scales was calculated. It was considered that there was statistical significance if $p < 0.05$.

56 patients were included. The MH was of 8 patients (12.5%), with an average age of 48 (SD 22), 75% were males. The main cause of the injury were traffic accidents (48.2%), followed by falls (17.9%). In the analysis of the GAP and RTS scales it was observed that presenting high severity is associated with HM ($p < 0.05$). Likewise, HM is associated with presenting a GCS < 9 points ($p < 0.05$). The AUC ROC of the scales analyzed was 0.915 (95% CI: 0.819-1000) for GAP ($p < 0.001$), 0.932 (95% CI: 0.857-1.000) for RTS ($p < 0.001$) and 0.826 (95% CI: 0.632 1,000) for GCS ($p < 0.001$) (Figure 1).

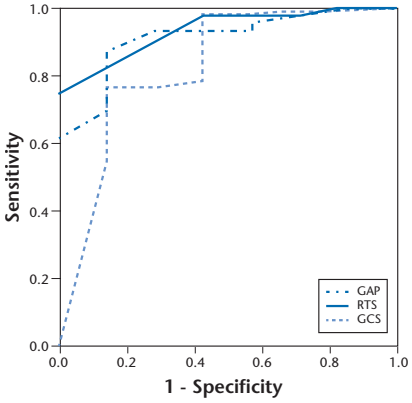

Figure 1. ROC curves of the different scales analyzed.

This study shows that HM of the SPP with severity criteria in the HED and that require admission to the ICU is high. This mortality is associated with the three scales studied, both GAP, RTS and GCS[5]. The scale that best predicts mortality in the sample studied is RTS, followed by GAP and GCS. Using these scales in the PTG is recommended in HED as a complementary tool, since it allows a more effective assessment of the patient's prognosis since his arrival at the hospital.

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Spontaneous renal hemorrhage: Wunderlinch syndrome

Hemorragia renal espontánea: síndrome de Wünderlich

To the editor:

Wünderlich syndrome (WS) or spontaneous renal haemorrhage is a rare but potentially serious entity, since it has a 30% mortality. The typical clinical picture consists of the Lenk triad: back pain of sudden onset, rapid formation of palpable lumbar tumor and signs of hypovolemic shock; however, it is only present in 20% of cases.

A 65-year-old man, hypertensive and with a history of lacunar stroke without sequelae, was treated with losartan 50 mg and clopidogrel 75 mg. He came to the emergency department due to a two-hour history of sudden onset, characterized by intense pain in the left lumbar region. Denying traumatisms, fever or voiding clinic. Upon arrival at the emergency room, a blood pressure of 91/60 mmHg and a heart rate of 96 bpm stood out. Cardio-

pulmonary auscultation was normal. He presented with palpation pain in the left flank and iliac fossa and positive left lumbar percussion fist. The analytical study included creatinine of 1.84 mg/100 ml, leukocytosis of 13.50 x 10^9/L, hemoglobin of 139 g/L and platelets of 261 x 10^9/L. The urinary sediment was normal. The abdominal radiography showed no alterations. Analgesia was started without improvement. An abdominal computed tomography (CT) scan was requested (Figure 1), where a heterogeneous mass of 11 x 8 x 16 cm was found occupying the left renal cell, displacing and compressing the kidney with signs suggestive of active bleeding embolization. The imaging tests ruled out the presence of neoplastic processes or vascular anomalies. The patient remained admitted and a follow-up CT scan was performed in a week, where hematoma decreased and the presence of new bleeding was ruled out. Subsequently, he was discharged and ambulatory follow-up was performed.

The most frequent causes of SW are renal tumors (50%)[1], vascular etiology (20%), infectious (10%) and coagulopathy (5.1%)[2]. The anamnesis and clinical exploration are fundamental and the suspicion should be established in all patients with back pain of sudden onset without trauma or previous efforts. It is estimated that the average time for requesting specialized assessment is 21 hours[3]. Abdominal ultrasound detects 82% of cases; but only in 40%, determines its etiology. The CT detects 100% and determines its etiology in 92% of them[4]. The treatment depends on the hemodynamic situation of the patient and the etiology of the bleeding. In cases of benign etiology and stable patients, we opted for conservative management, with follow-up by CT. Nephrectomy is reserved for cases of malignant etiology and urgent nephrectomy is used when hemodynamic instability exists[3]. Selective renal arteriography for embolization of the bleeding vessel is a very useful technique. It can help confirm the diagnosis, define exactly the hemorrhagic zone and control the bleeding, and can thus avoid urgent surgical intervention[4]. The physicians must take into account this entity in the differential diagnosis of back pain of sudden onset with fist positive lumbar percussion; especially when there is no triggering cause, the urine sediment is normal and the patient takes anticoagulants or antiaggregants.

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Figure 1. Computed tomography images showing a hematoma of 11 x 8 x16 cm that occupies the left renal cell (arrows) displacing and compressing the left kidney.

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Usefulness of clinical ultrasound in the management of a difficult airway during resuscitation

Utilidad de la ecografía clínica en el manejo de una vía aérea difícil durante la reanimación

To the editor:

The cricothyroidotomy is a surgical technique used urgently or emerging opening of the airway (AW) that allows access to the trachea through puncture in the space and cricothyroid membrane. This technique is used when other AW isolation methods such as orotracheal intubation (OIT), the technique of choice, and in difficult airways fail, either because of the patient's anatomy or because of the pathology itself, as is the case with the polytraumatized. The isolation of the AW and proper ventilation are the fundamental maneuvers to achieve the survival of this type of patients; Therefore, this technique must be known and used by all professionals working in the emergency and emergency services.

Traditionally, it has been performed by anesthetists and it is with this group of professionals that several studies have been carried out. Elliott et al.[1] assess the accuracy of the location of the puncture site with the traditional method (30%) and with the help of an ultrasound, being greater with the latter. Other authors such as Curtis et al.[2] publish a study where they are able to perform an echo-guided cricothyroidotomy in cadavers, locating the cricothyroid membrane in just 3.6 seconds and performing the entire

process in 26.2 seconds, achieving almost 100% effectiveness. In turn, Maté et al.3 and Sustić et al.[4] provide more information about the possibilities of ultrasound, since it not only helps improve the technique, but also provides information on the location and follow-up of the endotracheal tube and possible complications that may appear during the procedure. All this means that we get a safer and more effective technique, performed in less time, which leads to an increase in the survival of these critical patients.

A 65-year-old male who was transferred by the emergency and critical care device (ECCD) in an emergent way due to loss of consciousness. An attempt was made to intubate in the outpatient setting due to decreased consciousness (Glasgow 5), without success and was transferred to the hospital with a Guedel tube and oxygen reservoir. Upon arrival, he had a Glasgow of 4, he was cyanotic, with 72% arterial oxygen saturation breathing through a reservoir mask and showed a short neck difficult to intubate. OIT was attempted without success, so an ultrasound-guided cricothyroidotomy was performed (Figure 1). The reference structures (thyroid cartilage, cricoids, tracheal rings and the cricothyroid membrane) were located quickly, as well as nearby blood vessels that could complicate the technique. The echo-guided puncture of the cricothyroid membrane was performed without incident. Finally, with the help of ultrasound, the correct placement of the tube was checked and bleeding was ruled out. The patient was in charge of the intensive care unit (ICU).

For the correct performance of the puncture of the cricothyroid membrane in an echo-guided manner, it is fundamental to correctly support the probe (high frequency) in the midline, following the longitudinal axis of the AW; thus, the tracheal rings, the cricoid and thyroid cartilages can be identified, as well as the cricothyroid membrane, which is visualized as an echogenic (white) line joining both cartilages. Then, and under the appropriate aseptic measures, the needle can be introduced (from cranial to caudal) seeing how it enters safely into the AW. Thanks to the handling of the ultrasound by the emergency professionals, the AW could be isolated from the patient in a fast and safe way, a fact that had not been possible with the conventional technique (OIT). This allowed to stabilize it and, together with the intensive care provided in later days, the patient survived a situation of extreme gravity. This case further supports the importance of incorporating ultrasound as a tool for the management of critical patients in emergency services..

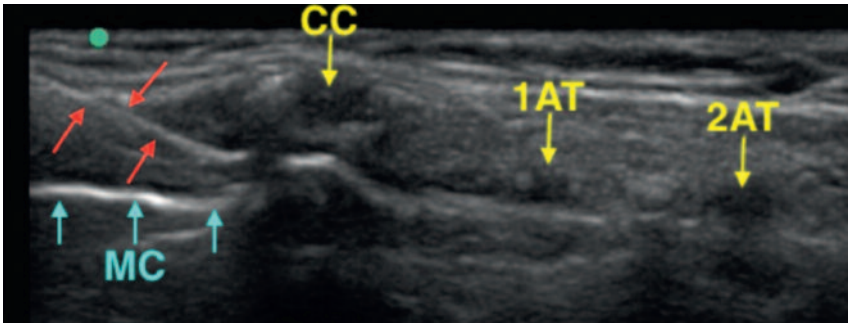

Figure 1. The cricothyroid membrane (MC), marked with blue arrows, is observed. In turn, in yellow, the cricoid cartilage (CC), the first tracheal ring (1AT) and the second tracheal ring (2AT) are shown. Finally, an echogenic line (white) is visible, marked with red arrows that correspond to the needle penetrating from the surface to the cricothyroid membrane.

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When a stroke is not a stroke

Encefalopatía de Wernicke que simula un ictus

To the editor:

The appearance of an acute neurological focality is a common reason for consultation in the emergency services. It is usually due to vascular causes and its prognosis has improved with the implantation of the stroke code. However, up to 20% of cases treated as a stroke code correspond to other etiologies[1].

A 78-year-old man attended the emergency room due to confusional syndrome that lasted several days, with temporal-spatial disorientation, marching with right lateralization and an increase in the base of support. Given the suspicion of stroke, a computed tomography (CT) with perfusion study was performed, which was normal. The patient denied consumption of toxins. He was admitted with the diagnosis of possible vertebral-basilar stroke. The next morning, in the exploration performed on the floor, nystagmus was observed in the horizontal plane and a paresis of both lateral rectus (Figure 1). The study was completed with a lumbar puncture and a cranial magnetic resonance imaging (MRI). The lumbar puncture showed a count of 10 leukocytes, 2 red blood cells, 49 mg/dL of proteins and a glucose 79 mg/dL. The study

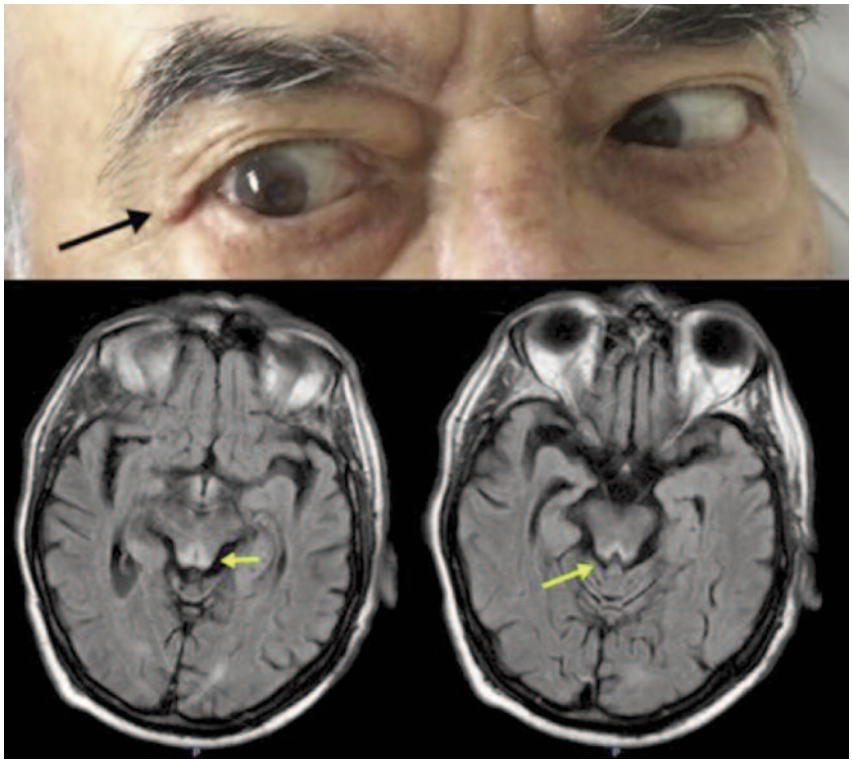

Figure 1. n the upper part, the paresis VI of the cranial nerve presented by the patient is observed. In the lower area the enhancement of quadrigesimal tubers (left, arrow) and quadrigesimal lamina (right, arrow) is shown.

of anti-ganglioside antibodies was negative, reasonably ruling out a Miller Fisher syndrome. In the FLAIR and T2-weighted sequences of the cranial MRI, hyperintense lesions were observed that affected the quadrigeminal plate and extended to the thalamic medial regions (Figure 1); findings compatible with Wernicke encephalopathy. Family members confirmed a significant alcohol consumption. The concentration of vitamin B1 was 2.8 µg/L (range 2-8 µg/L). Treatment was started with vitamin B1 500 mg/8 h, with progressive resolution of the clinical picture

Wernicke encephalopathy (WE) is a potentially serious condition if it is not treated in time. It is characterized by ataxia, confusion and ophthalmoplegia. Studies conducted with necropsies reveal an incidence in the general population greater than expected by clinical studies[2], which suggests an under diagnosis. Likewise, blood thiamine concentrations may be low but within normal levels, which is why it has been postulated that they do not reflect vitamin B1 concentrations in the central nervous system[3]. An apparent susceptibility of the female sex to the development of EW[3] has been observed. Anorexia, pregnancy, prolonged fluid therapy (especially with glucose serums) without proper supplementation, bariatric surgery, neoplastic diseases, transplants, dialysis and AIDS are some of the etiologies that, apart from alcoholism, can precipitate the development of an WE[4]. Treatment is recommended for all high-risk patients (alcoholism, malnutrition, history of intestinal malabsorption) without a clear diagnosis of encephalopathy, oculomotor involvement and ataxia. Thiamine 500 mg i.v. three times a day for three consecutive days and then 250 mg/24 h for 5 more days, in combination with other vitamins of the B[5] complex.

In conclusion, in the presence of a patient with an acute neurological focus, an expert neurological assessment is necessary since the initial diagnosis is basically clinical. An inappropriate diagnostic orientation can lead to iatrogenesis and a delay in the treatment of neurological entities that can simulate an acute cerebrovascular event[1].

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Topical sevoflurane for rescue analgesia in refractory pain due to chronic venous ulcers

Sevoflurano tópico como terapia de rescate de dolor refractario en úlceras venosas crónicas

To the editor:

The intense pain associated with chronic wounds is a frequent reason for consultation in the emergency department (ED) and is associated with a significant deterioration in the quality of life of the patient[1]. Sevoflurane is a volatile liquid for hospital use as a general anesthetic by inhalation. It has been reported that irrigations of sevoflurane on the bed of

painful ulcers can produce a rapid, intense and lasting analgesic effect[2-5].

An 84-year-old man was independent for daily living activities, with a history of congestive heart failure and atrial fibrillation, anticoagulated with acenocoumarol. He was admitted for an episode of heart failure and developed at the high level very painful venous vascular ulcers in the right lower limb that were treated with enzymatic debridement for a month and a half without response. Mechanical debridement was ruled out because of the intense pain and the risk of bleeding. Basal pain had a somatic and neuropathic component, incapacitated him from wandering and sleeping, was refractory to local analgesic treatments (cream of lidocaine and prilocaine) and systemic (non-steroidal anti-inflammatory drugs -NSAIDs- and opioids); and the patient showed signs of opioid toxicity. He went to the emergency department and consulted with the pain unit that dismissed invasive analgesic measures due to the poor clinical situation of the patient. They proposed treatment, outside the technical file, with topical sevoflurane with the written consent of the patient and a family member, hospital pharmacy service and medical management (according to Royal Decree 1015/2009, which regulates the availability of drugs in special situations and their use under conditions other than those authorized). Irrigation of sevoflurane directly on the wound reduced pain from 10 to 2 points on the simple verbal scale, in less than one minute, despite the diffusion barrier posed by necrotic eschar (Figure 1A). For 12 months he was treated daily with sevoflurane at home, without experiencing any type of adverse effect, and withdrawal of the systemic analgesic treatment was achieved. The evolution of the lesions was also excellent, with progressive reduction in size and almost complete healing (Figure 1B). The patient regained his previous quality of life, the ability to wander and independence for activities of daily life.

The rapid analgesic efficacy of sevoflurane in wounds refractory to other analgesics has been observed in other patients with chronic vascular wounds[2,5], even when there is a neuropathic breakthrough pain component[5]. The mechanism of action by which sevoflurane produces hypnosis during general anesthesia is not known exactly, and the local analgesic mechanism on wounds is not known. It has been speculated that this analgesic effect could be due to an effect on peripheral nociceptors[2]. With regard to the healing of wounds, as in this case, it could be partly mediated by the well-known vasodilatory effect of sevoflurane. Therefore, the use of topical sevoflurane on painful wounds may be a therapeutic option to be evaluated in EDs and its use should be studied in wounds of different etiology.

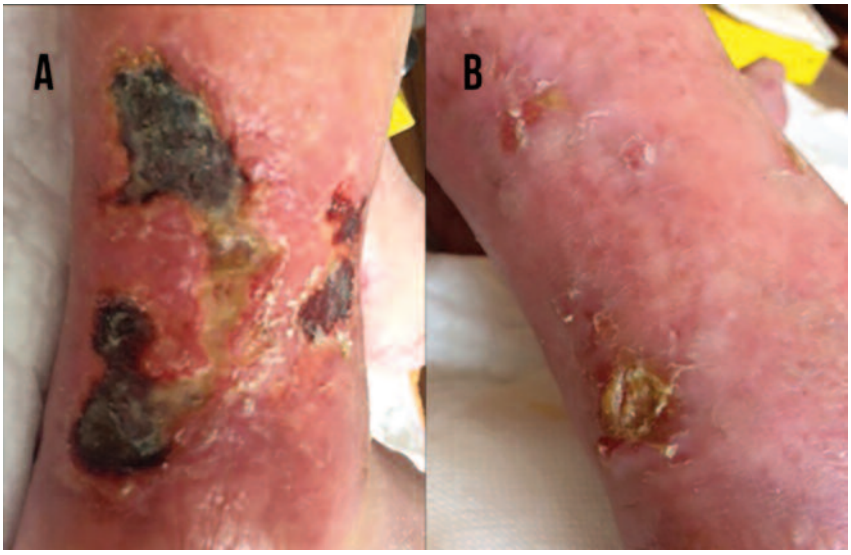

Figure 1. Aspect of the wound before the first application of sevoflurane (A) and after 12 months of daily irrigations (B).

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