USEFUL FLAPS FOR SKIN CANCER SURGERY.

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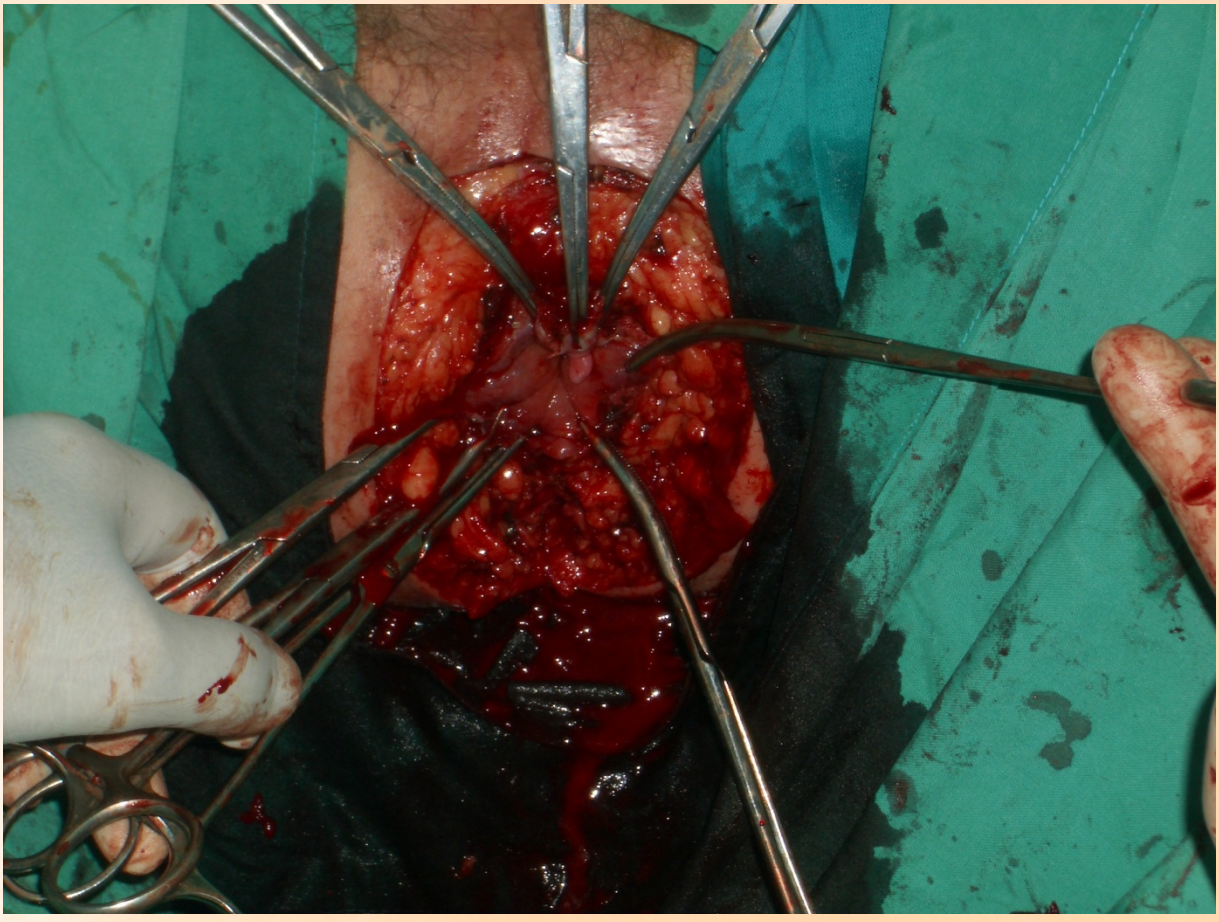
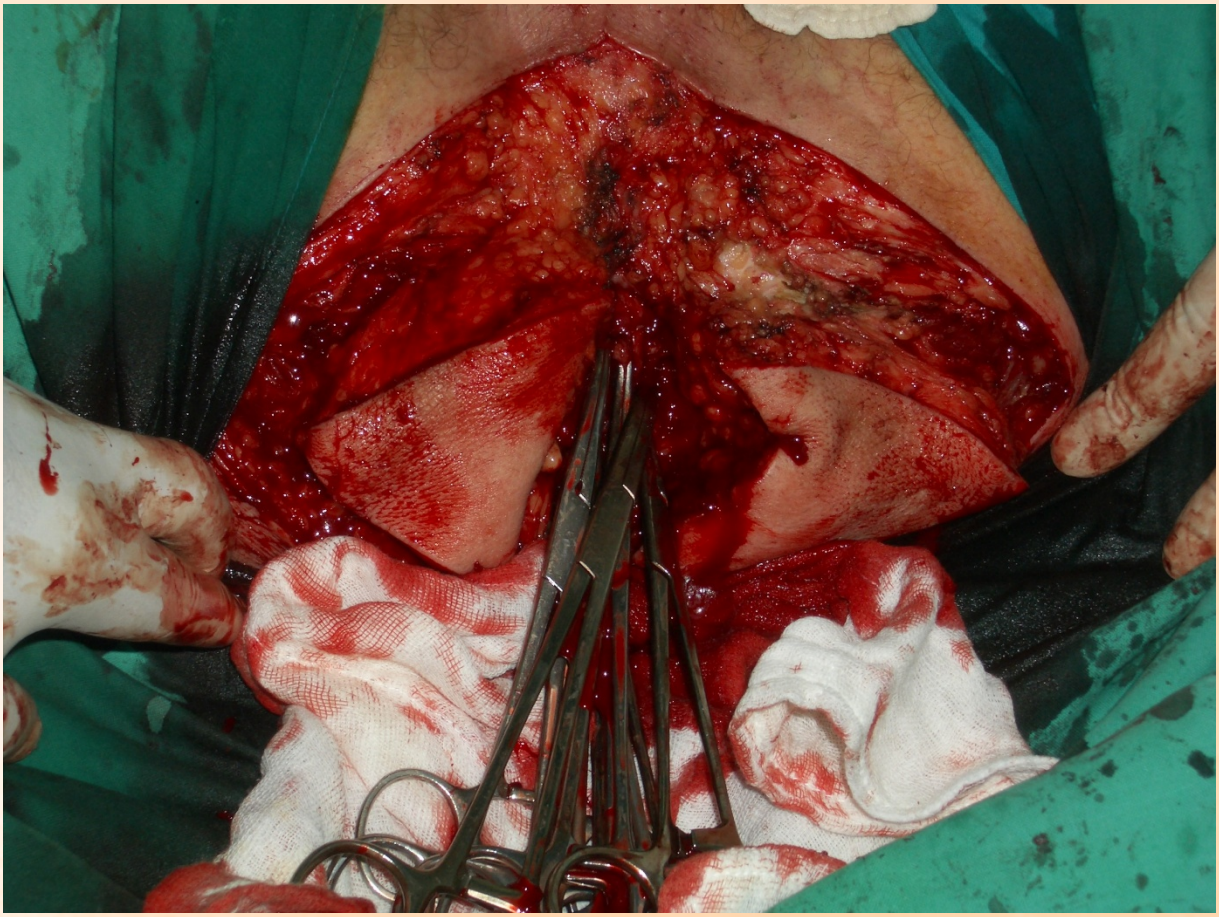
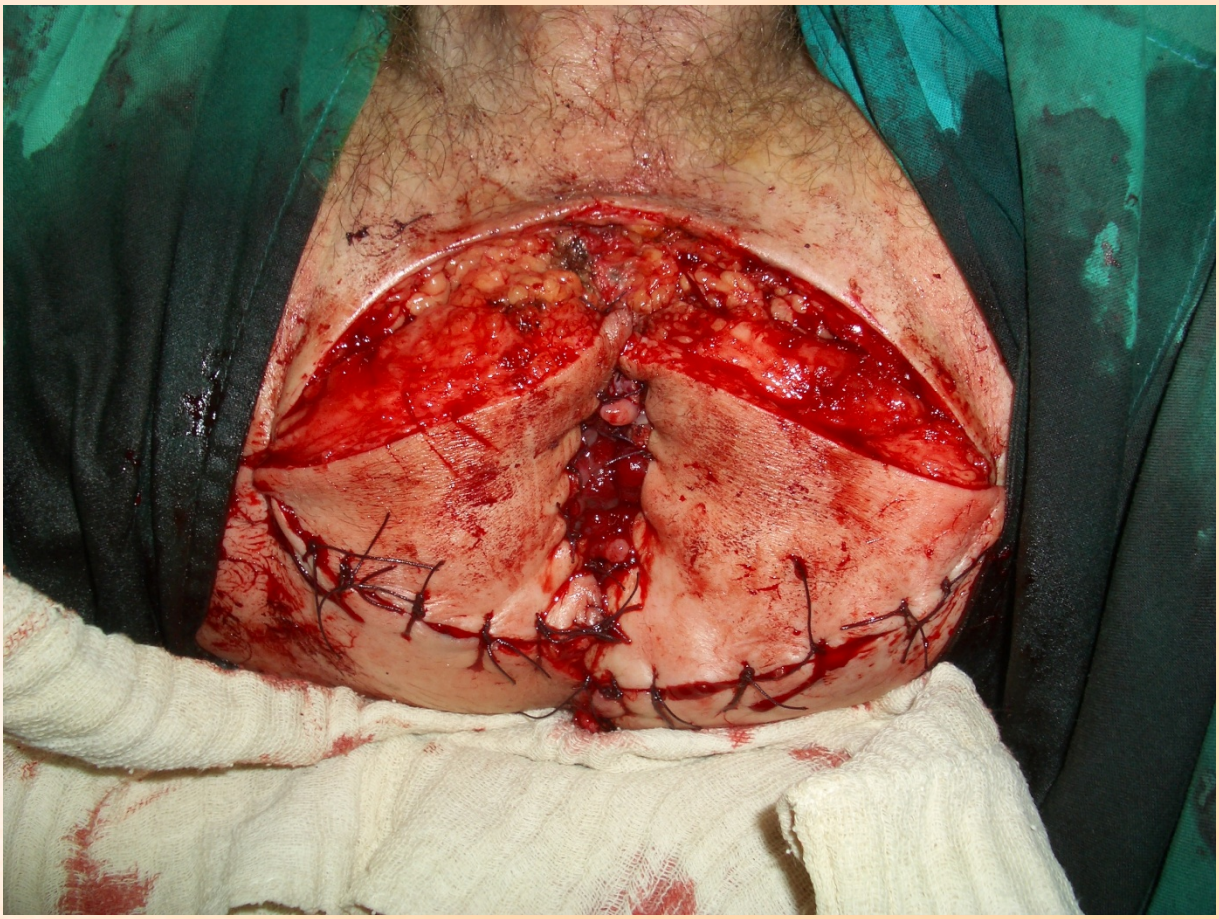
- ***Introduction:***
- ***- excision of skin cancers may often leave wide defects requiring early cover by STSG either by local or distant flaps. Even though from the oncological view point, STSG are considered the best option for covering large defects remaining after skin tumors removal (they are more versatile and a possible recurrence can have a better follow-up), in many situations this procedure is not advisable: for instance on physiognomic areas or other zones underlying “noble structures” such as joints, tendons, bones and so on. That is why a multitude of local either distant flaps can be designed and harvested in order to cover the wide post-excisional defects mentioned above. Some of these useful flaps will be further detailed.***



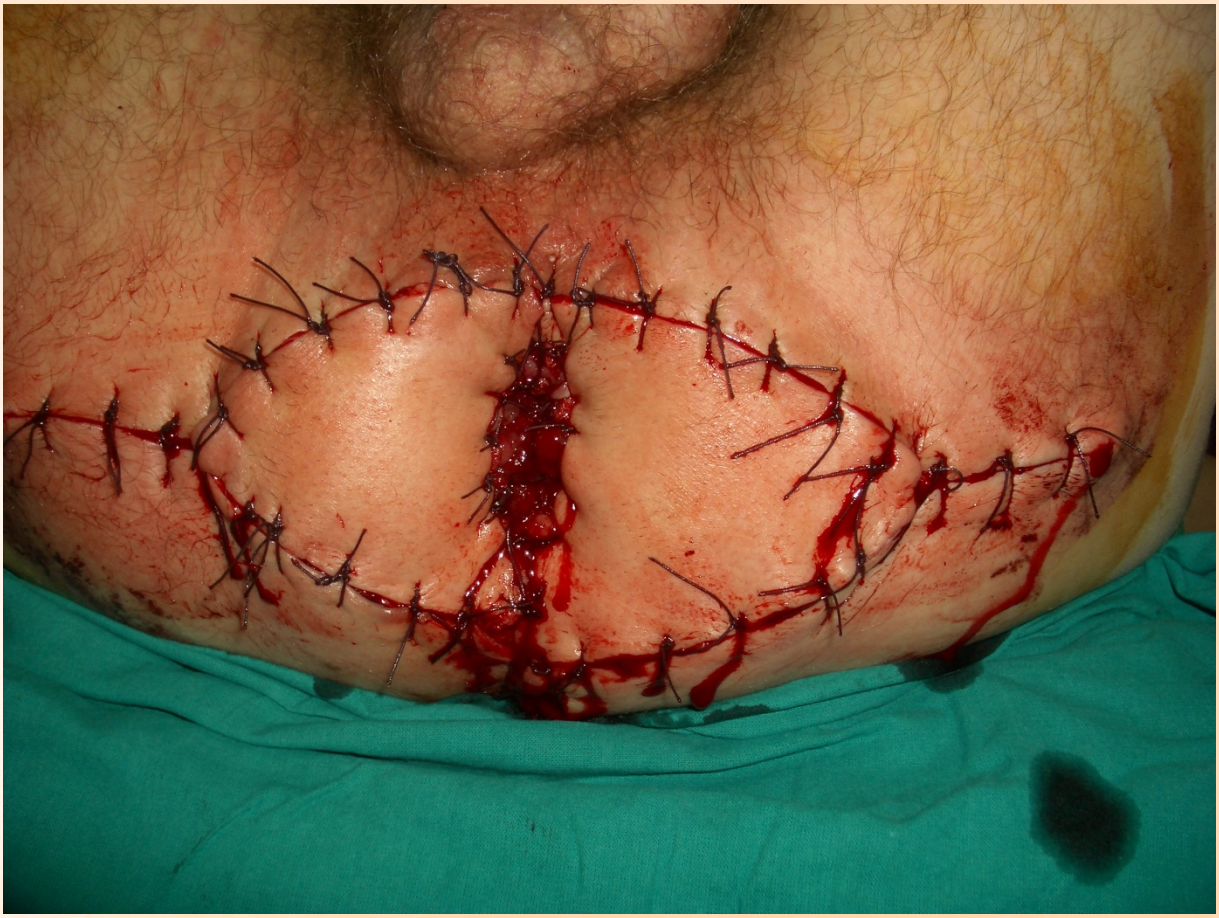
- ***CASE NR.1: 53 year old patient with an ulcerated anal melanoma which has underwent a very large excision (perianal region, a part of the external sphincter, ischiorectal fossae and all the skin overlying these above mentioned structures); sphincter reconstruction was also mandatory in order to avoid fecal incontinence.***



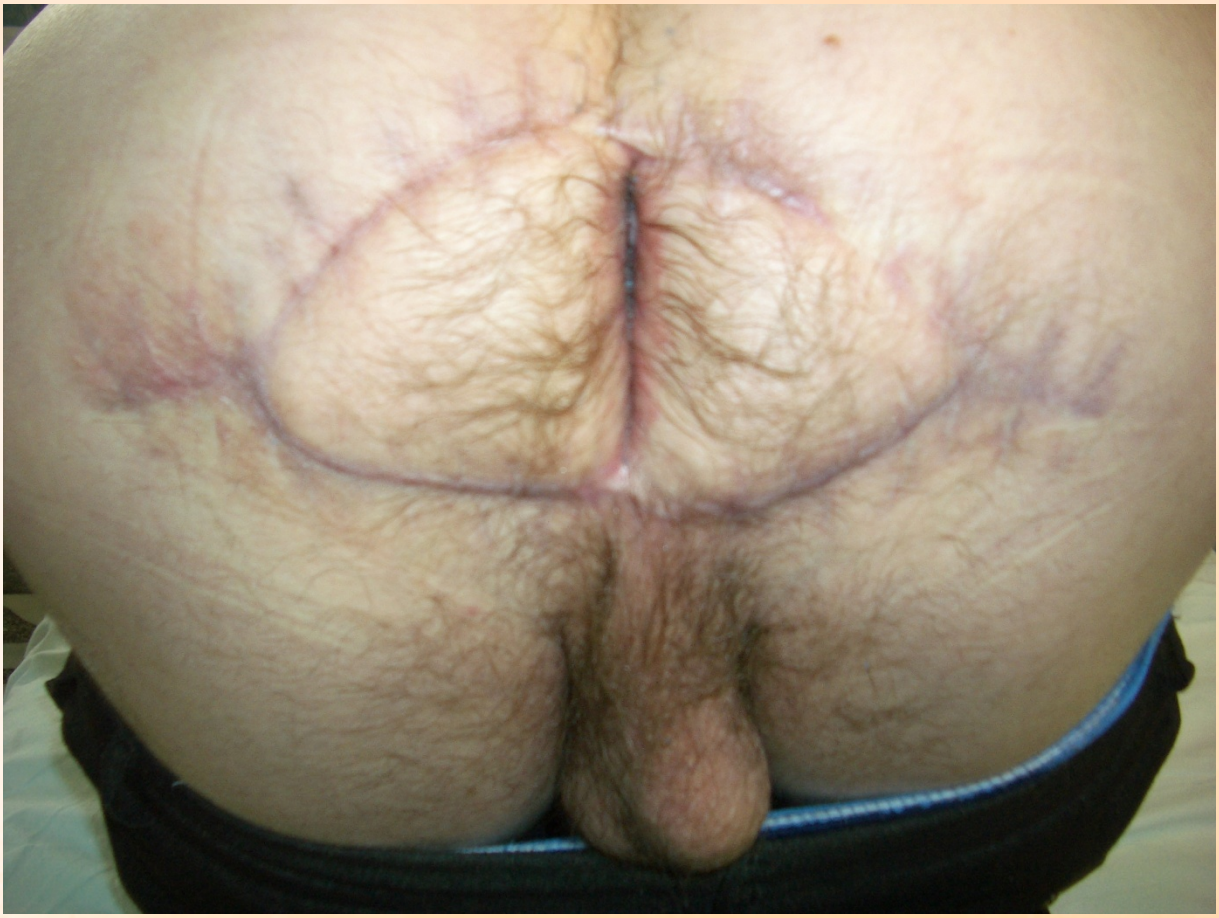
- ***Two large triangular gluteal flaps have been harvested and advanced to the external sphincter, which has been sutured as mentioned before (“V-Y” advancement).***



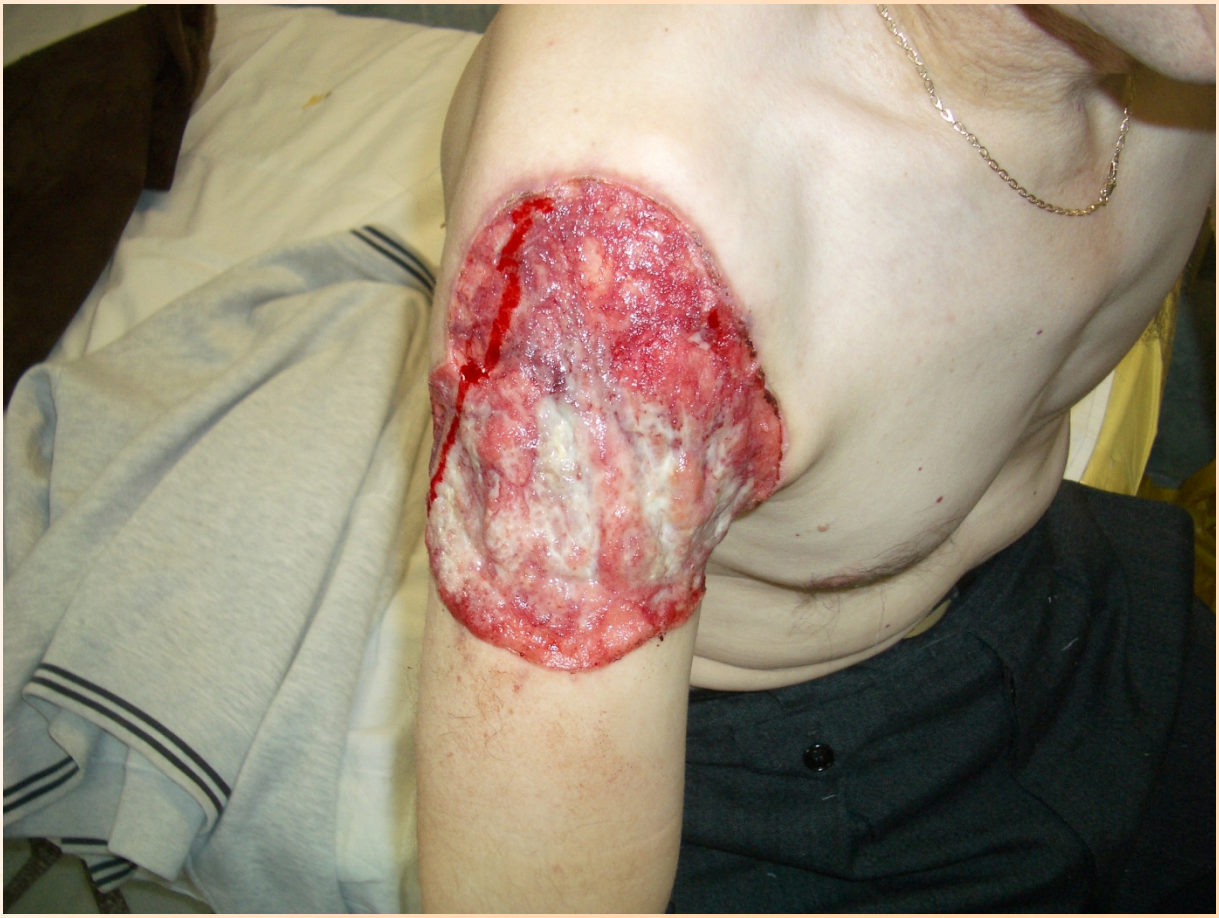
- ***The image from above shows the two flaps advanced in their new position and sutured to the external sphincter.***



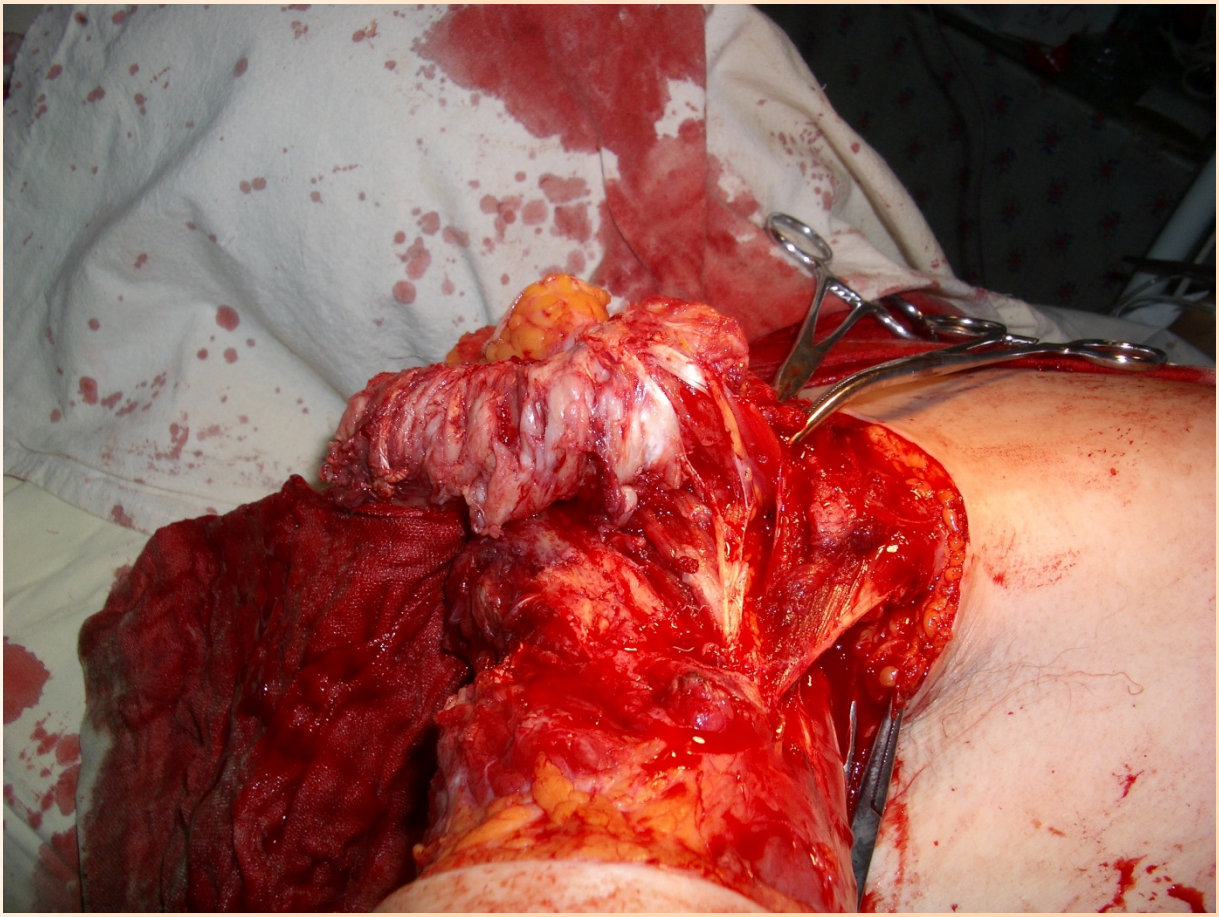
- ***24 hours later, the two flaps show a very good color with no swelling and no other problems (fecal incontinence for instance). One month later this patient had a new operation (large pelvic and abdominal LND – lymph nodes dissection).***



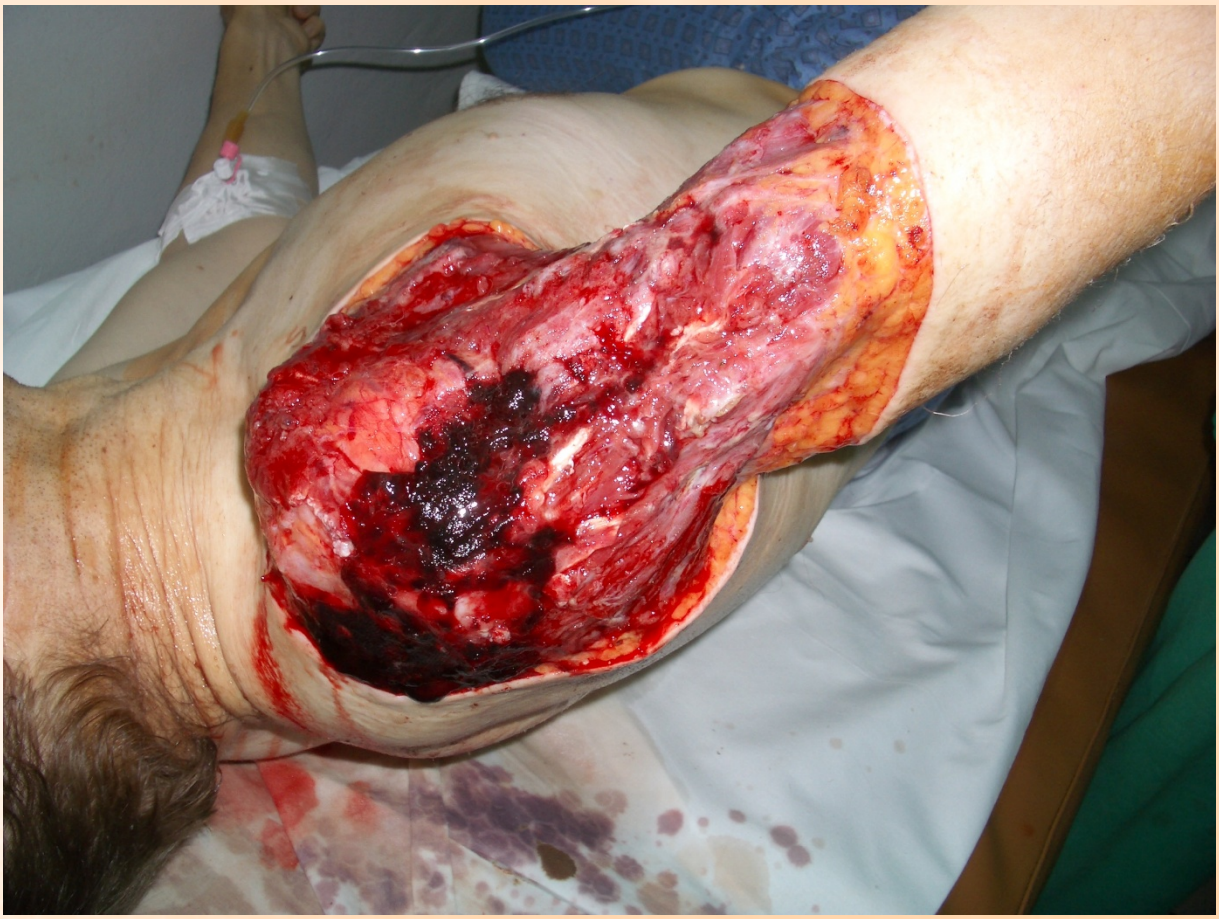
- ***One year later the two flaps have a very good aspect and function (no incontinence) and there is no recurrence of the extensive ulcerated melanoma). This patient has been operated 4 years ago and he has a permanent follow-up every 3-4 months; fortunately, he has no new medical problem related to the initial MM.***



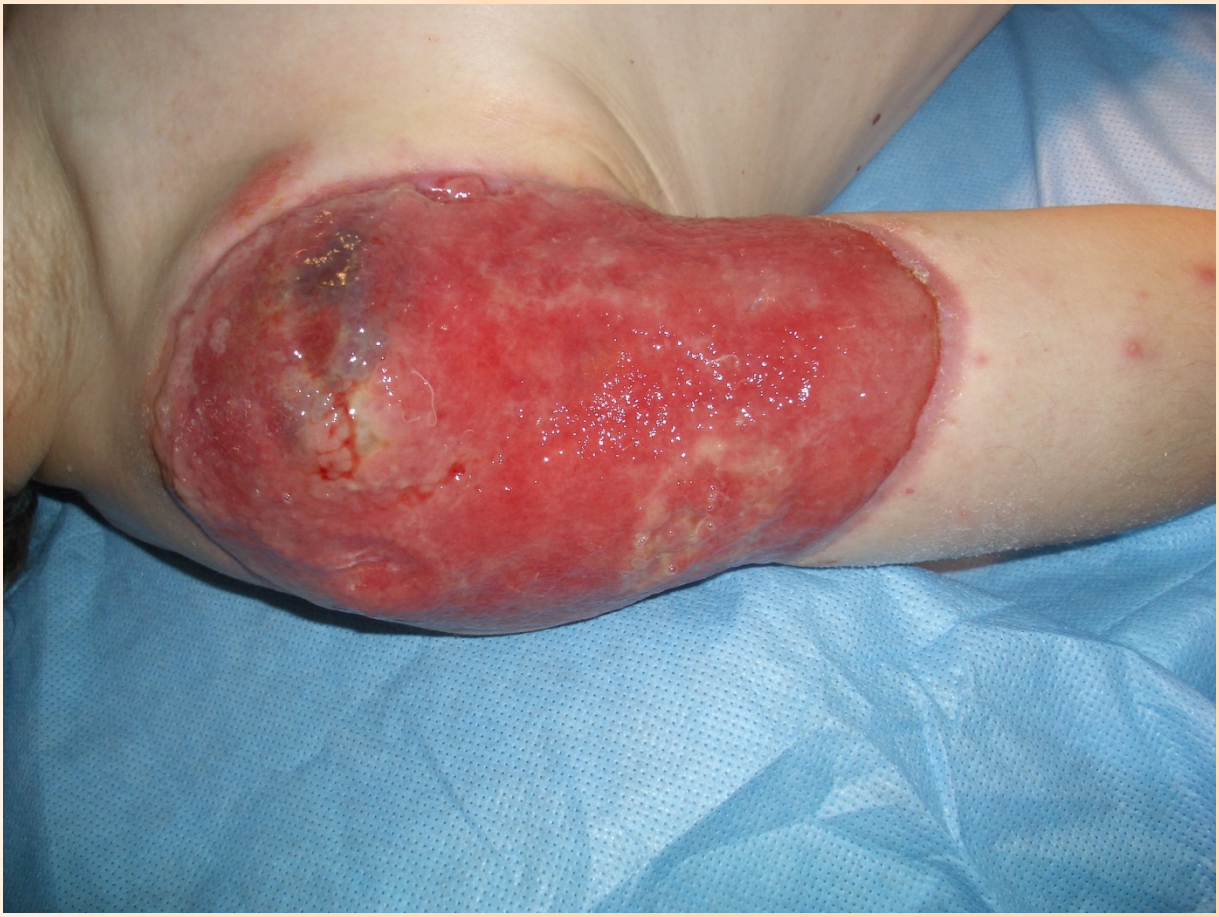
- ***CASE NR.2: 55 year old male with a giant neglected BCC (basal cell carcinoma) of the right shoulder; the huge ulceration appeared 11-12 years ago and developed progressively, but the patient medicated himself with "unconventional" remedies such as Swedish Bitter and Chelidonium Majus ointment.***



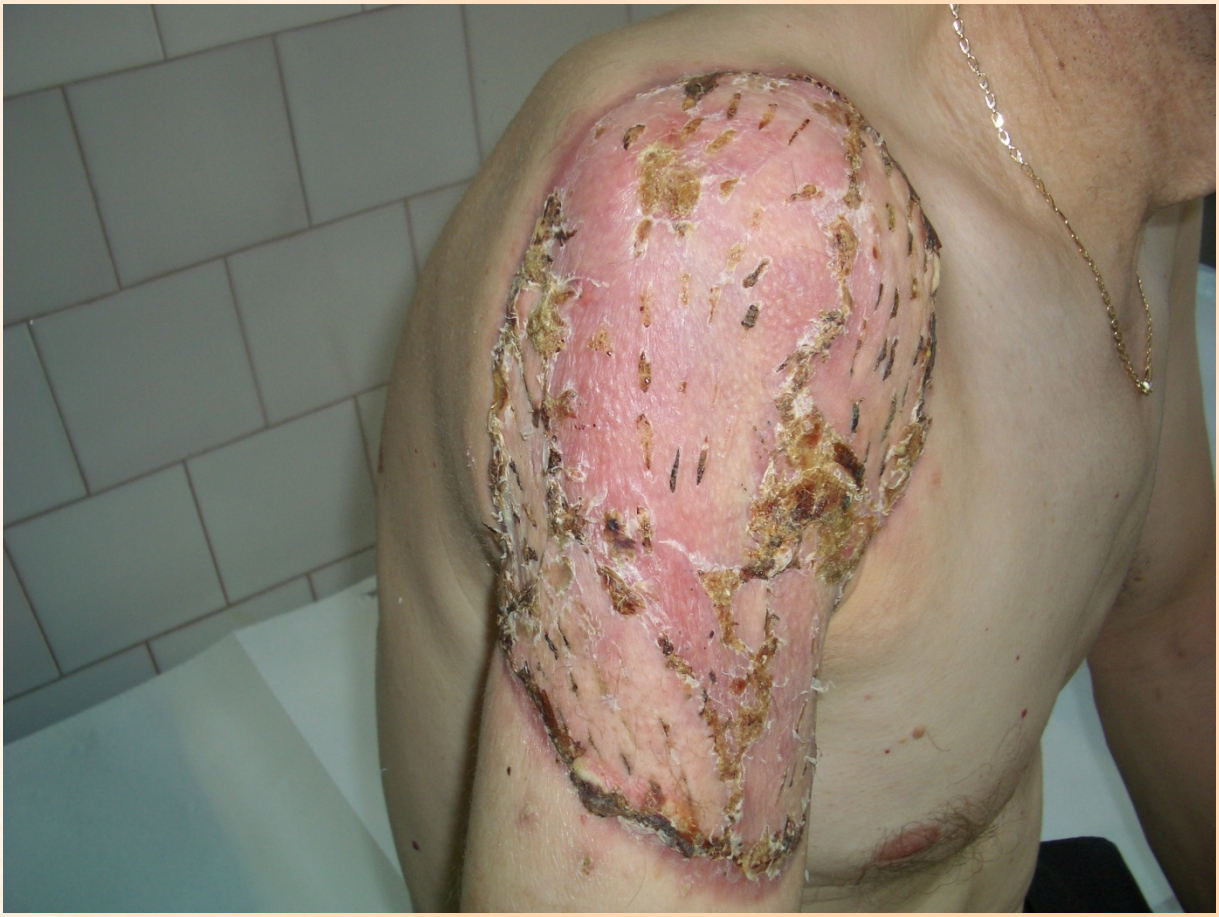
- ***Very large excision was performed, involving the most part of the deltoid muscle, as one can see in the image from above.***



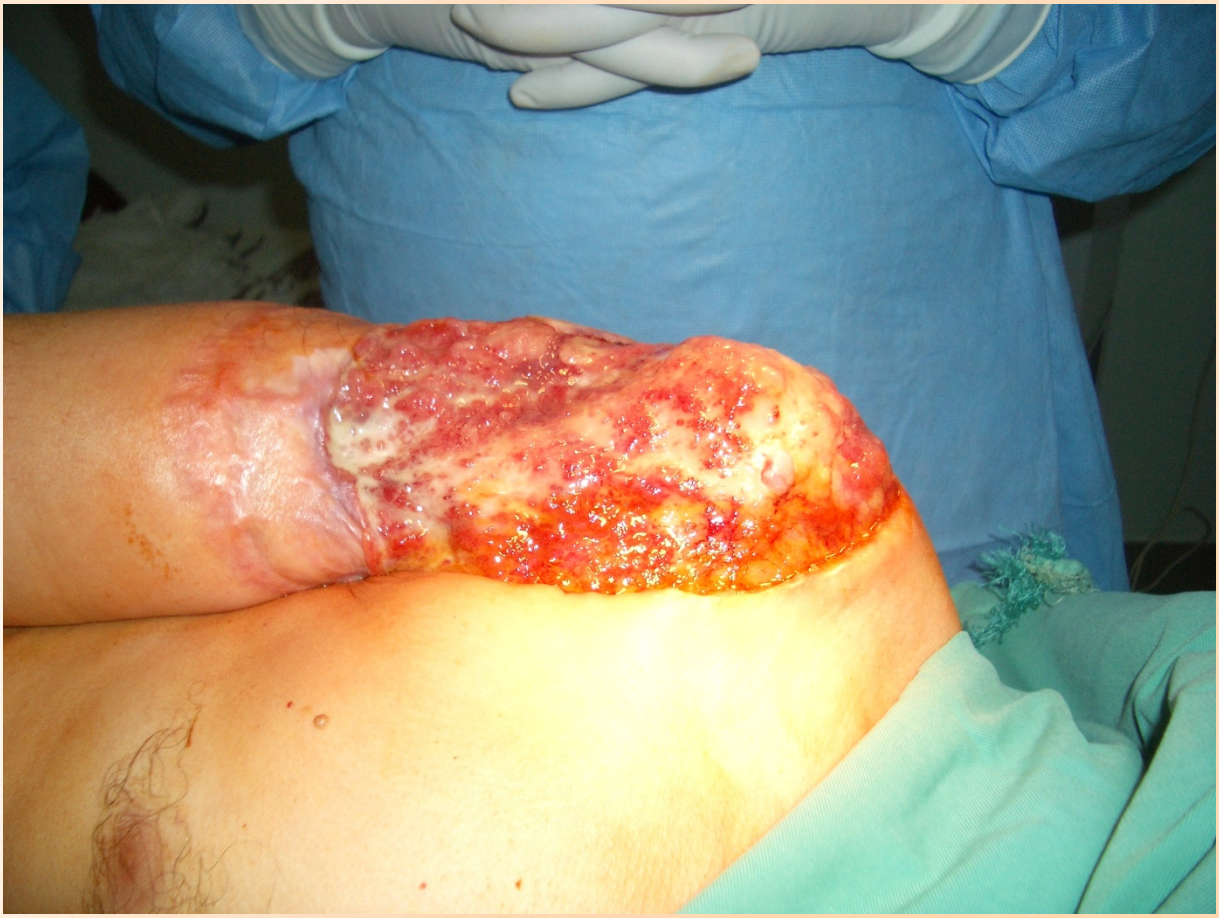
- ***The huge excisional defect has been covered with Ligasano PUR-foam dressings for about two weeks, in order to obtain a better wound bed to be covered by STSG.***



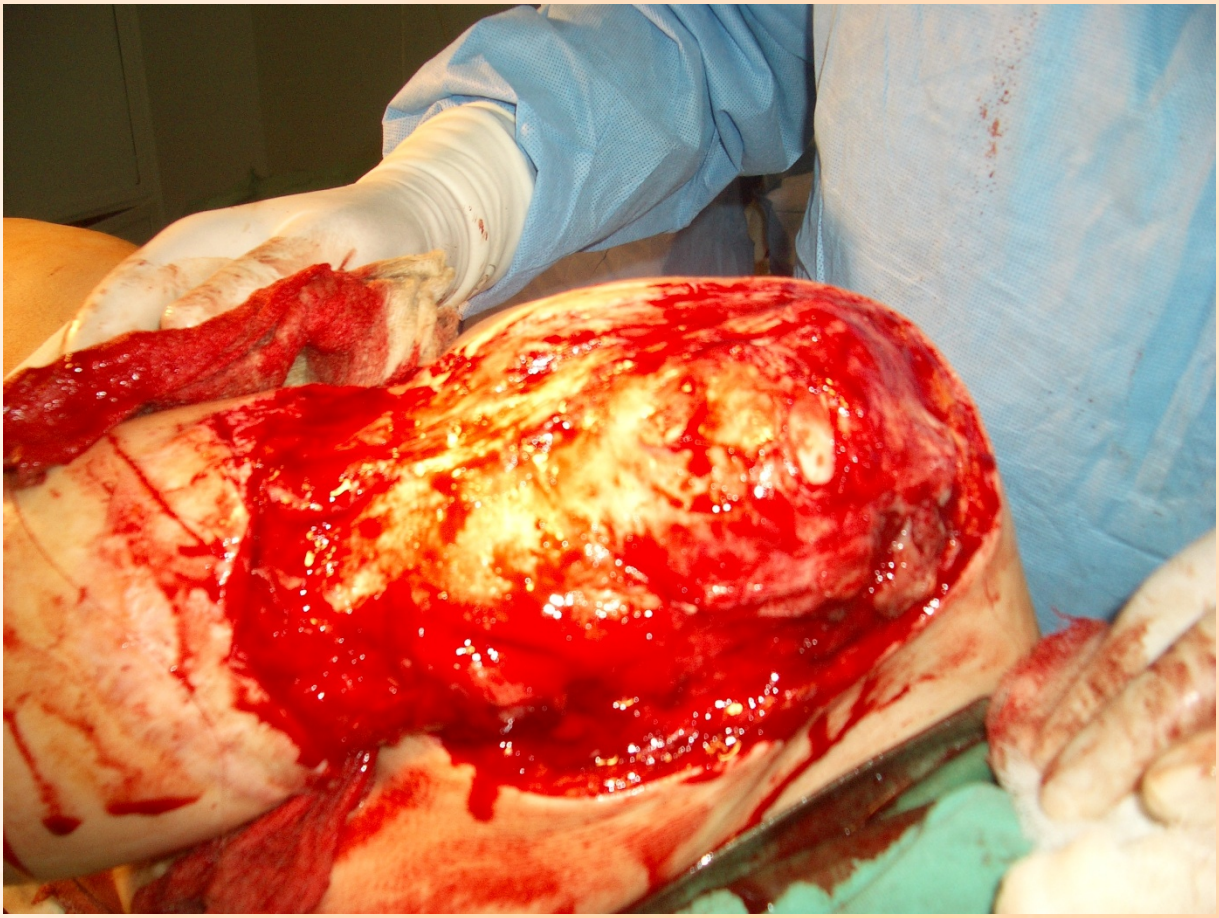
- ***The very good granulation bed thus obtained is eventually grafted with meshed STSG.***



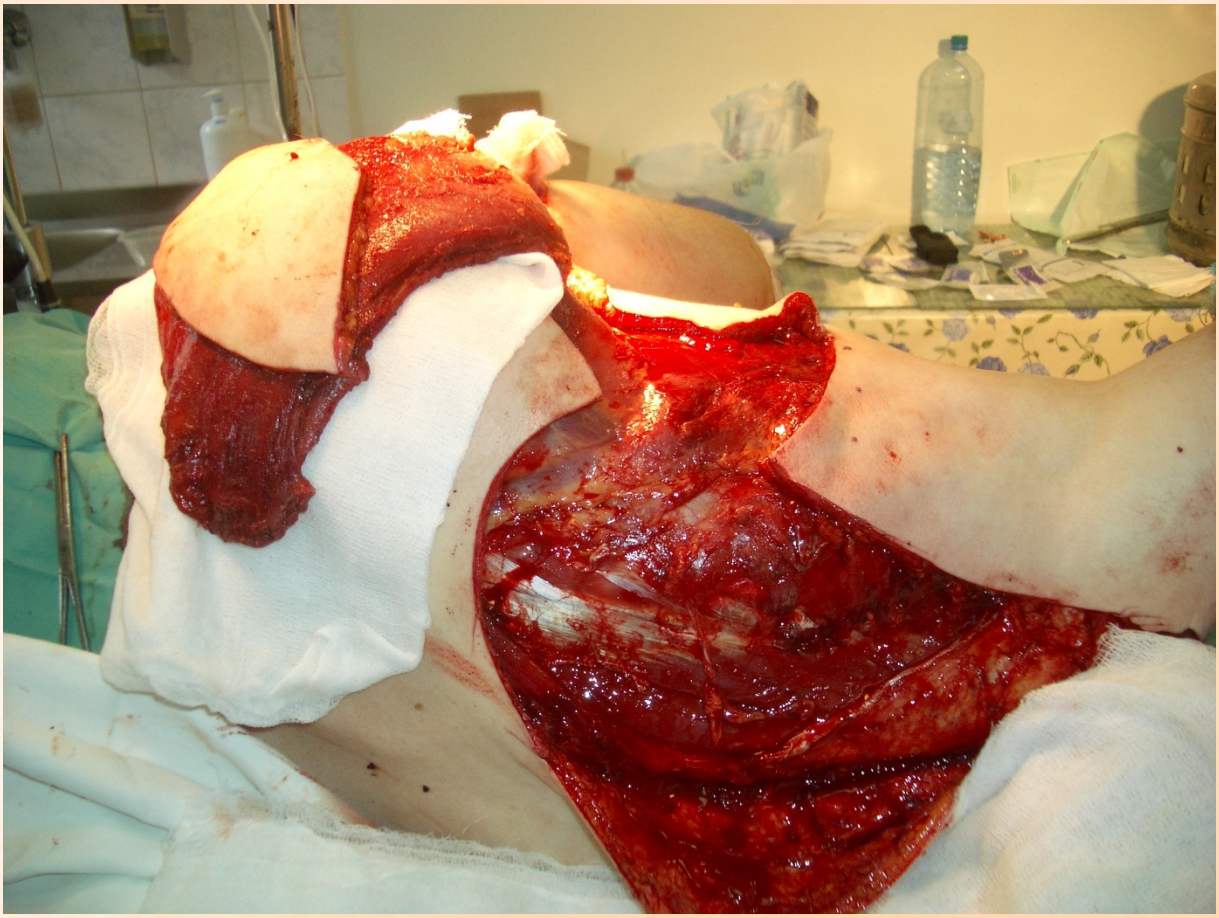
- ***Ten days after the STSG shows a very good color and integration; this patient refused all oncologic surveillance and additional treatment leaving the hospital with no follow-up program.***



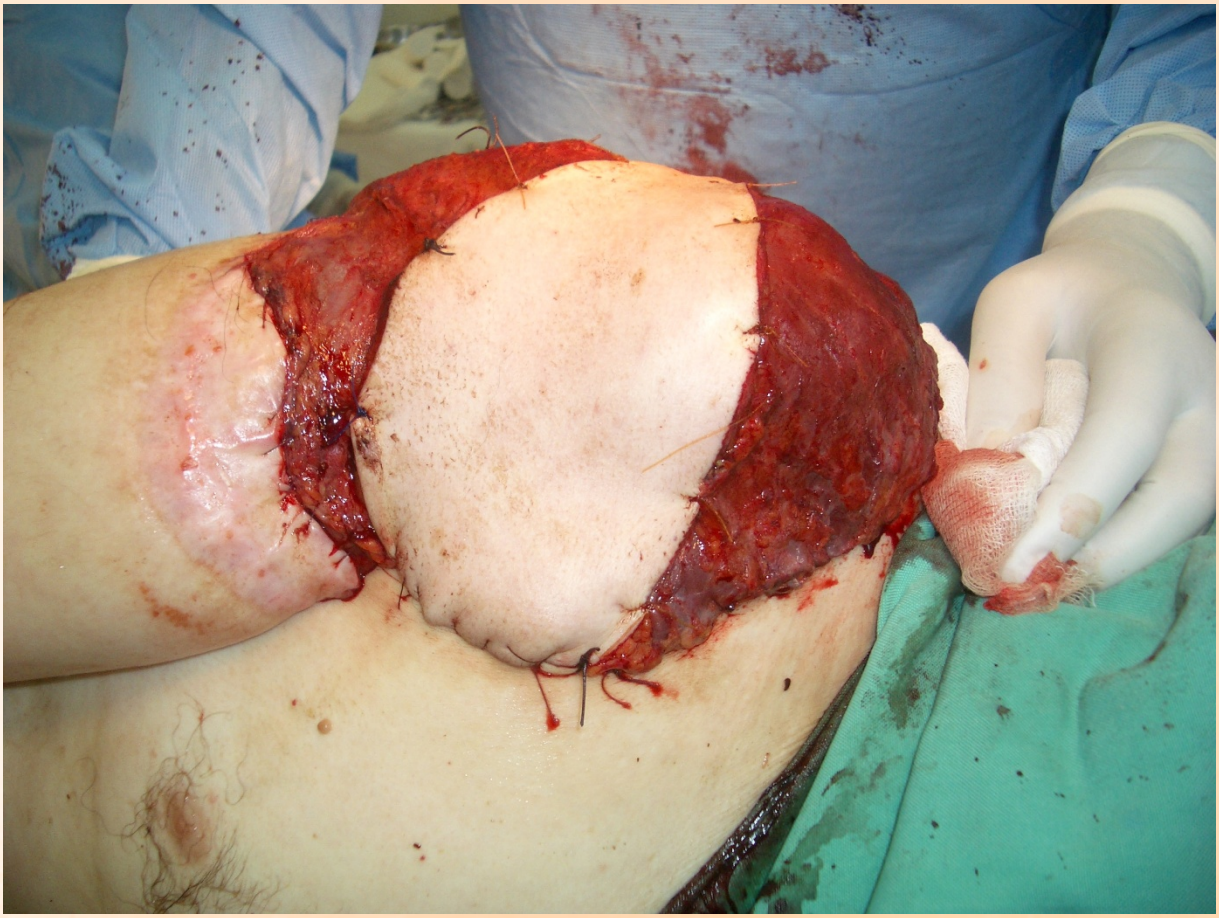
- ***He was admitted again two years later with a huge neglected recurrence of the same BCC, involving this time the adjacent muscles and the shoulder joint capsule.***



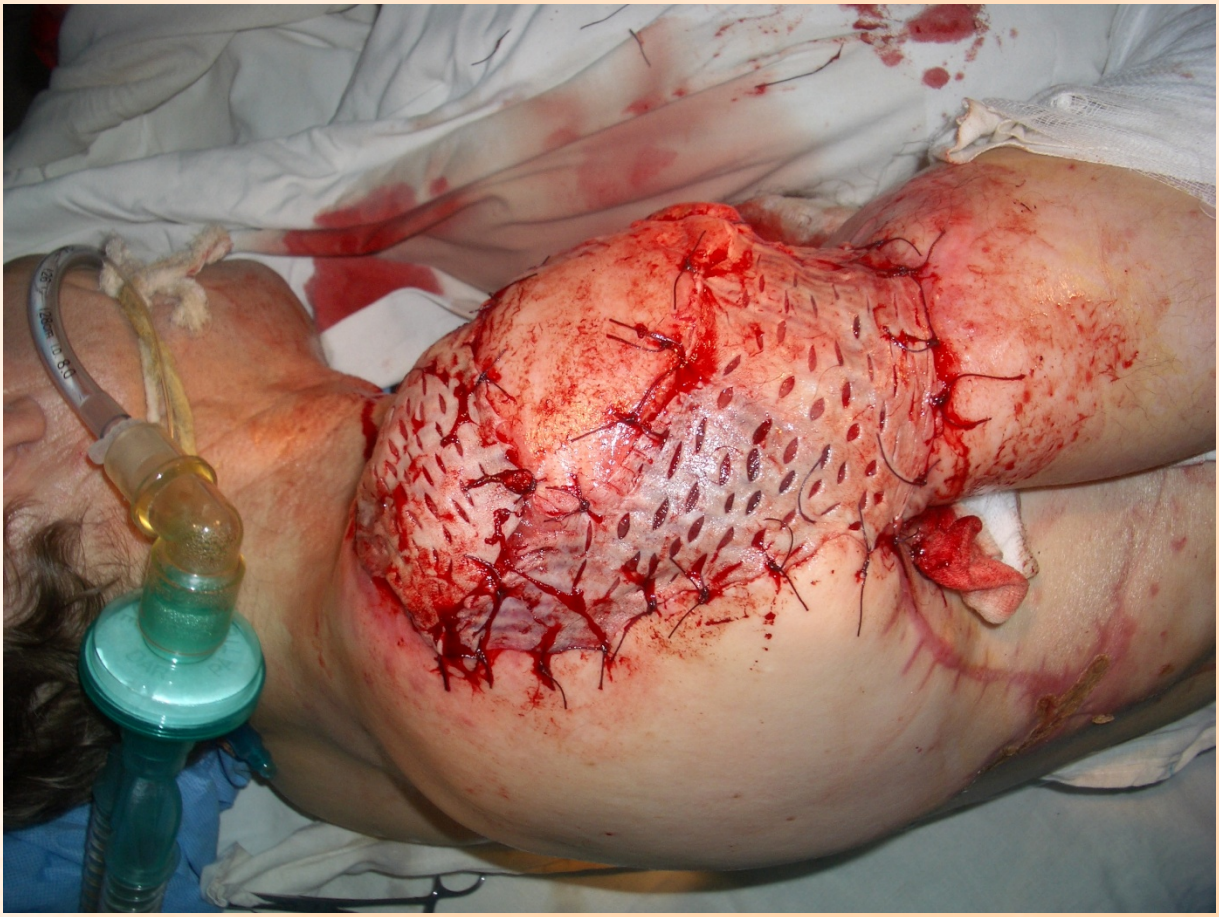
- ***A very large excision was performed again, removing all infiltrated tissues; from the oncologic point of view, the best option was to do a shoulder amputation, but this patient did not accepted this intervention.***



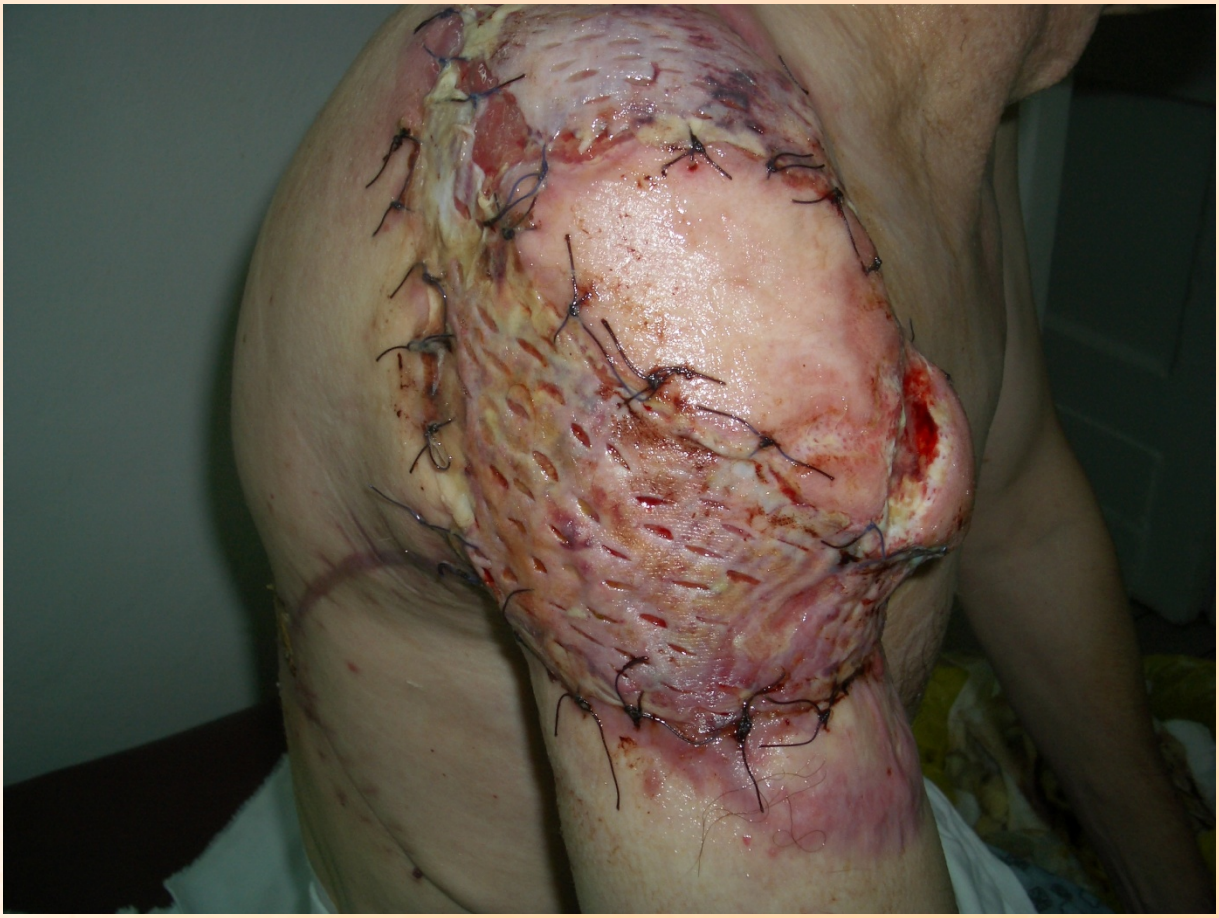
- ***The giant excisional defect was covered by a Latissimus Dorsi myocutaneous flap, harvested from the same side with the lesion.***



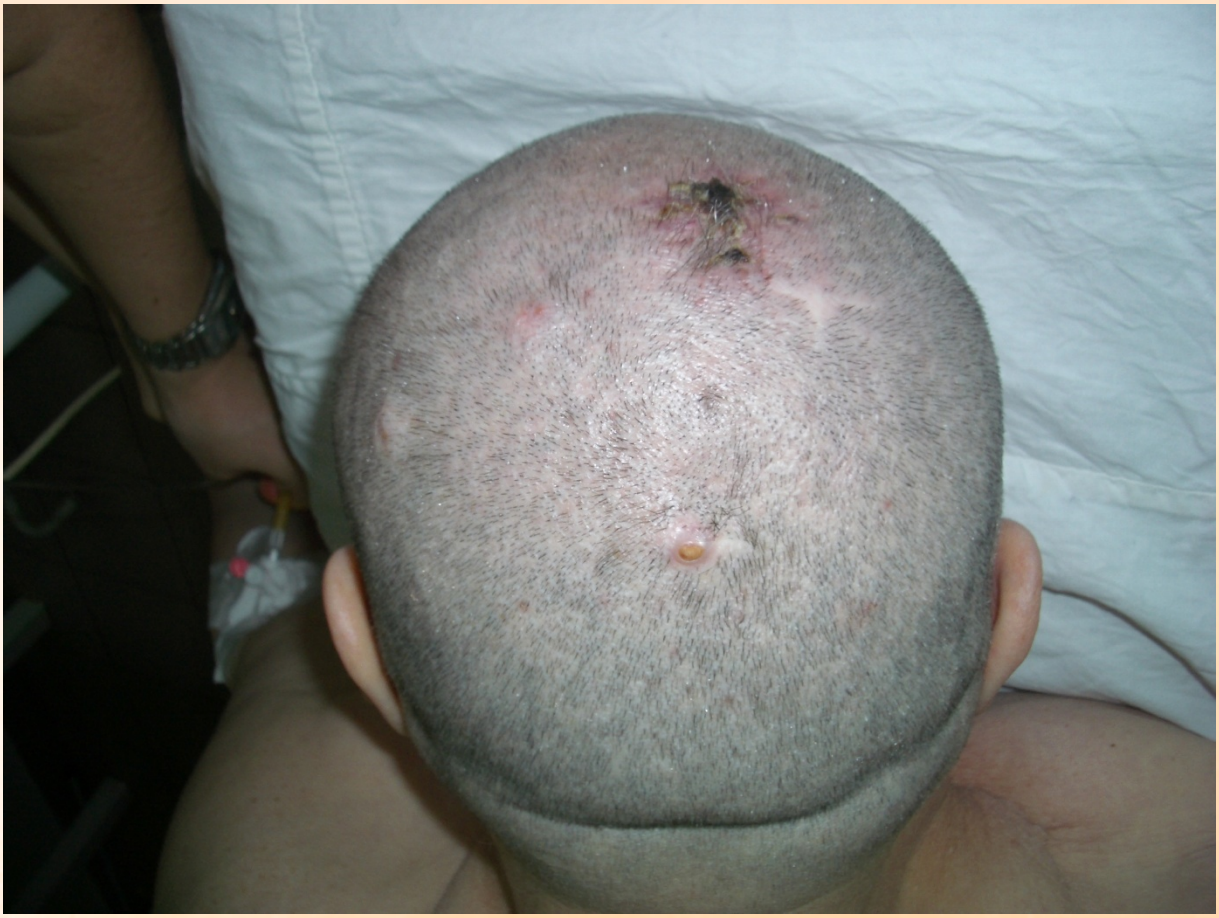
- ***The image from above shows the latissimus dorsi rotated and sutured into the excisional defect.***



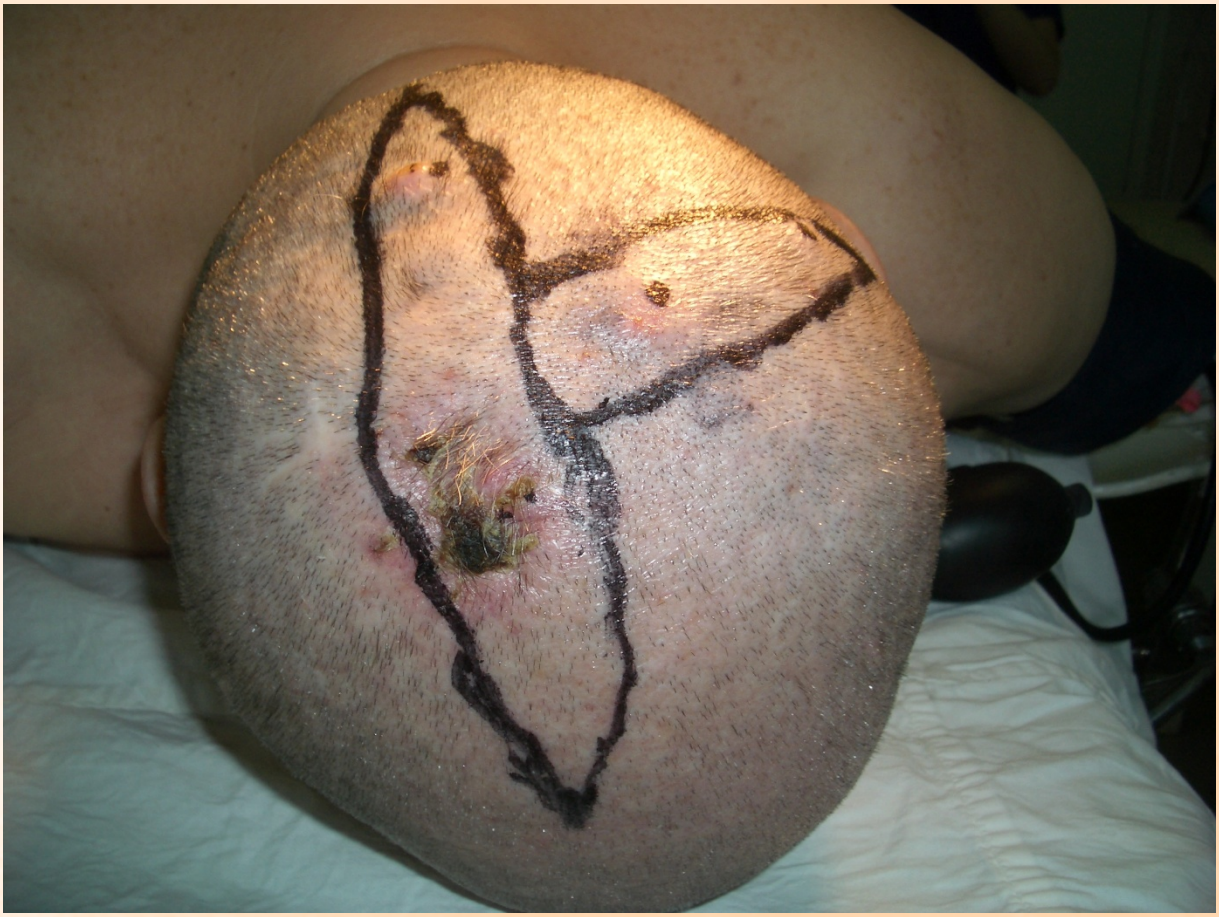
- ***The remaining uncovered part of the latissimus dorsi flap has been eventually grafted with meshed STSG.***



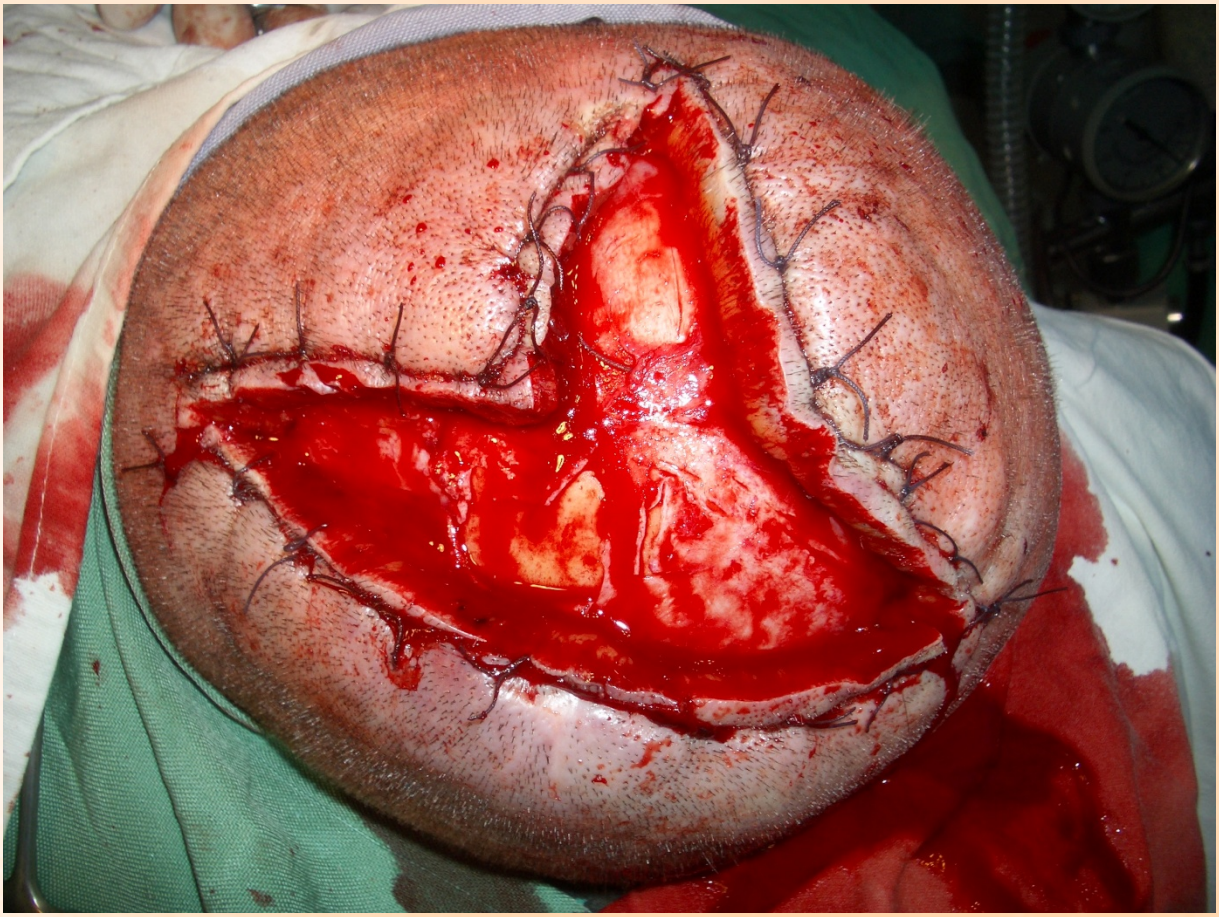
- ***This image shows the final result 10 days later, with a very good color of the flap and skin grafts and an acceptable cosmetic and functional aspect. Unfortunately he refused again any other treatment and he left the hospital in good condition. Two years later he was admitted again with a small recurrence on the anterior edge of the flap but with massive tumoral invasion of the axilla (lymph nodes, nerves, blood vessels and so on). He refused shoulder amputation and oncologic treatment and he eventually went home (there are no more news about him in the last 3 months).***



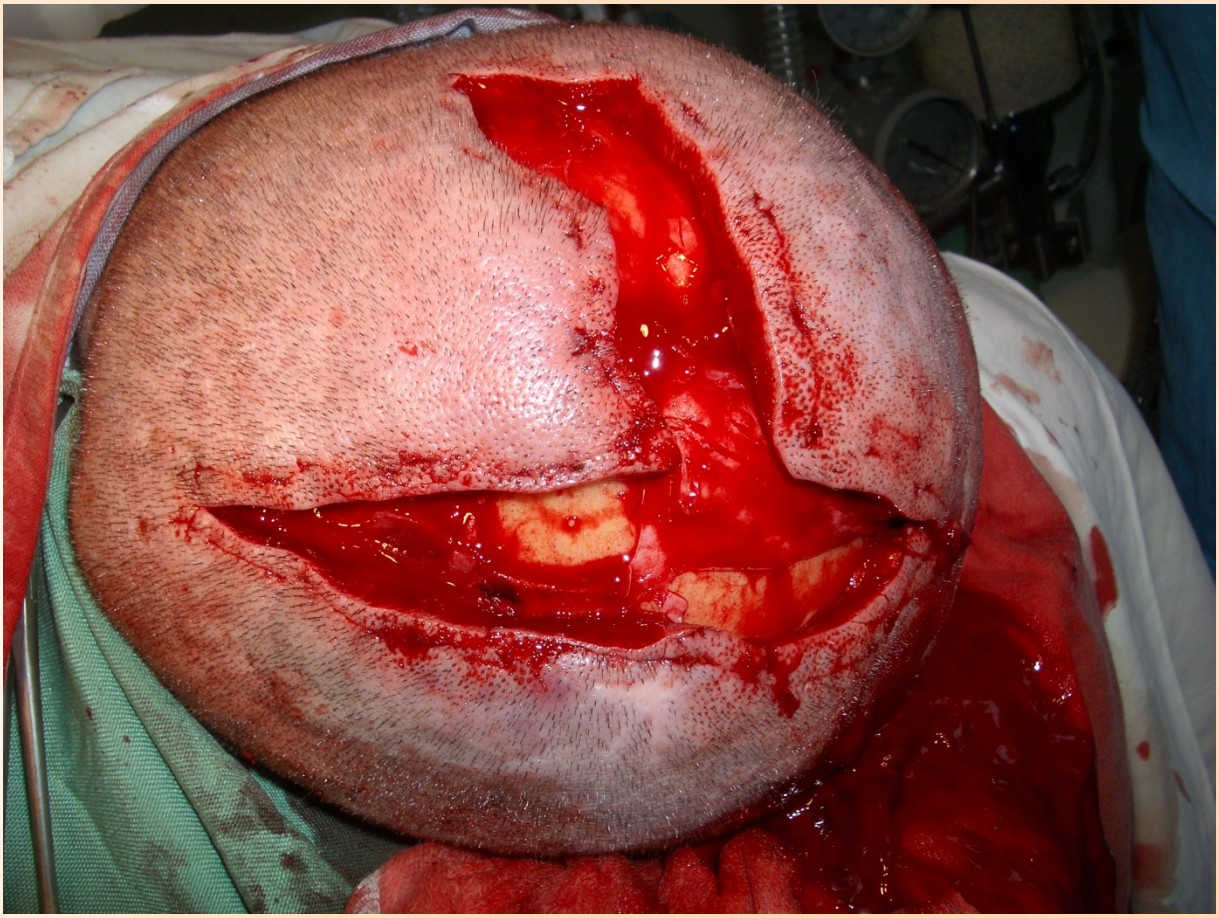
- ***CASE NR.3: 67 year old female patient with a multicentre borderline epidermoide carcinoma of the scalp; she has been operated (excisional biopsy in a General Surgery Department) and the pathology sample has indicated a BCC with many microscopic evidences for a SCC (a histology mixture between the two carcinomas).***



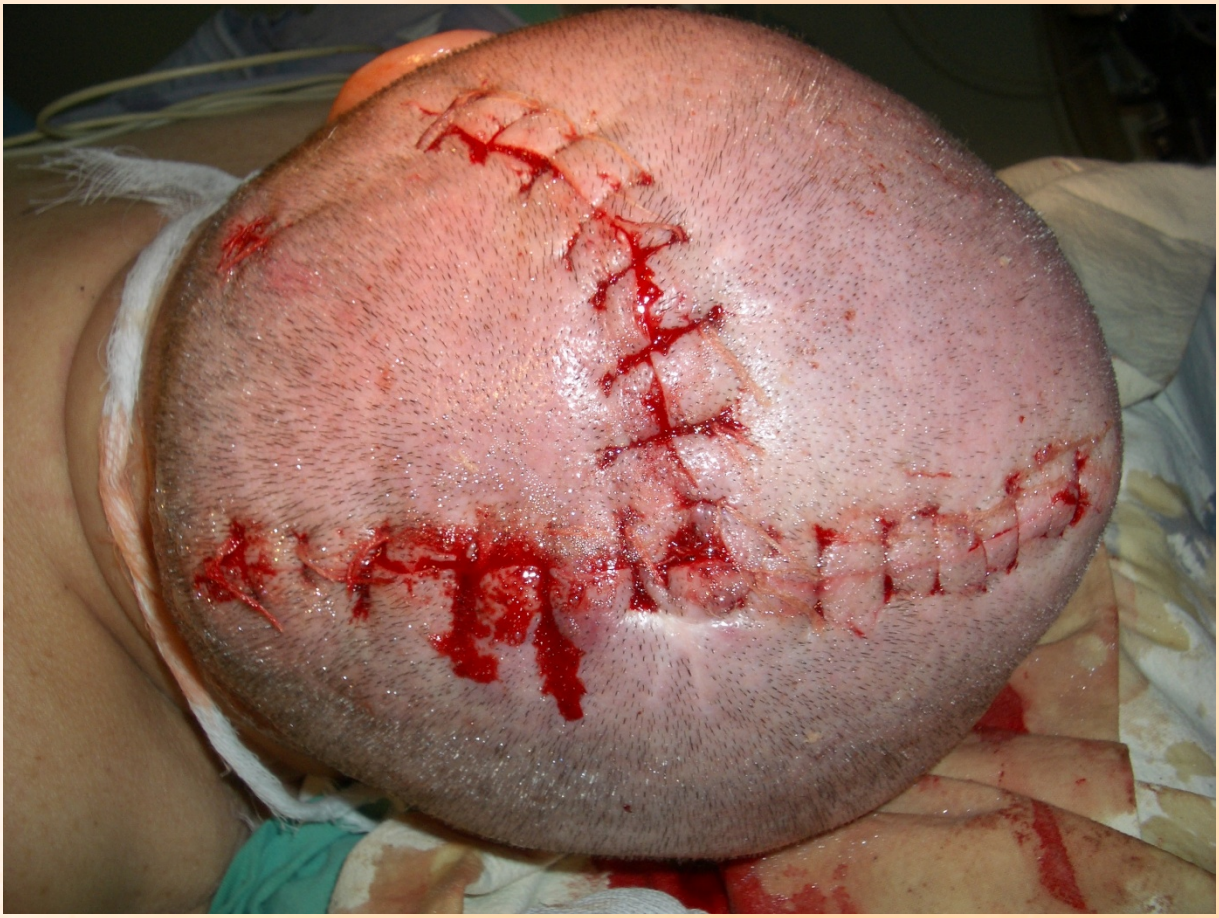
- ***A large excision of the scalp was necessary in order to remove the 7 nodular and ulcerated carcinomas which can be seen in the image from above (beside this , one can see the design of the future flaps required to close the wide scalp defect (a variant of the Orticochea “banana peeling”).***



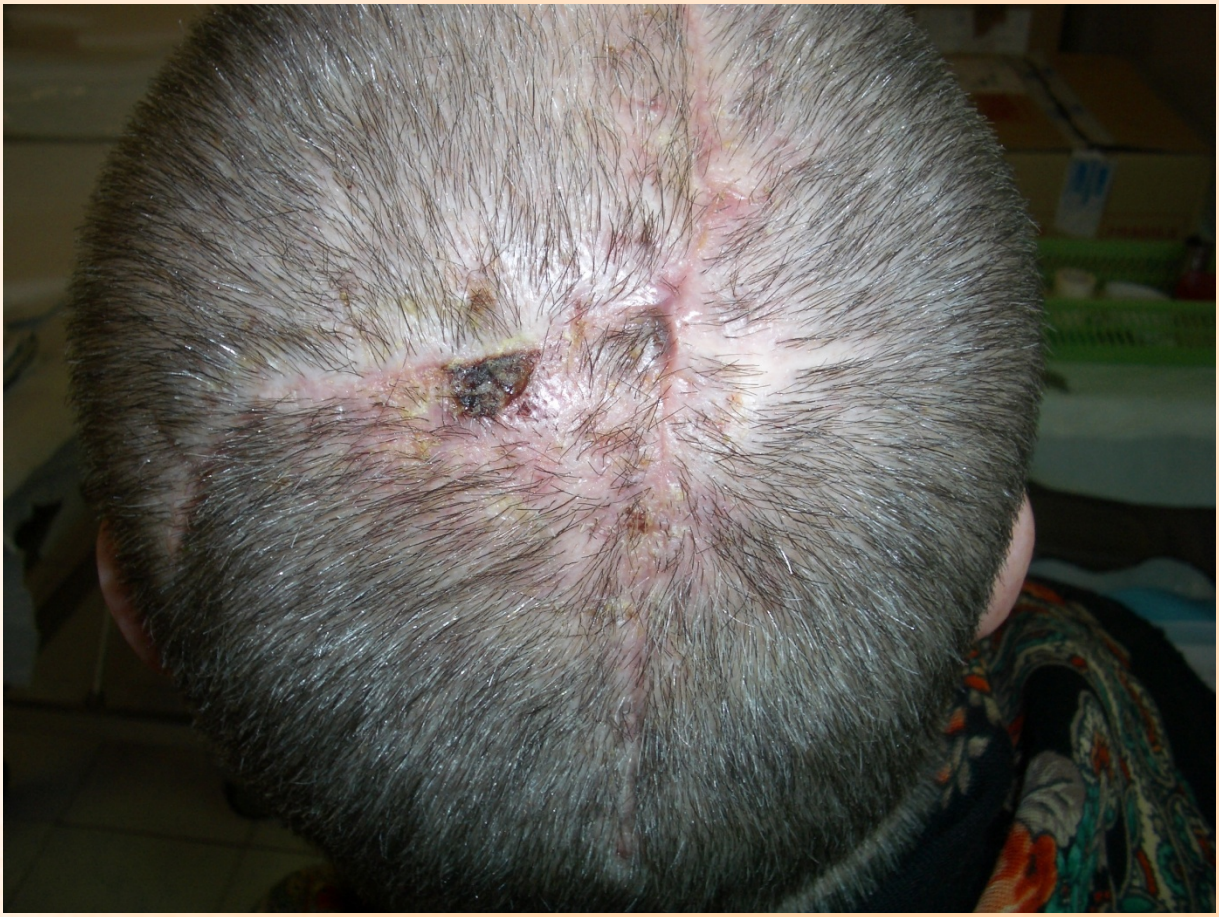
- ***The image from above shows the wide excision of the nodular tumors; the full-thickness sutures are a personal method (which I am using for many years in every surgical procedure performed on the scalp), in order to avoid a big blood loss from the scalp vessels (I don't have special scalp clamps, so I had to do this method which is very simple, cheap and reliable).***



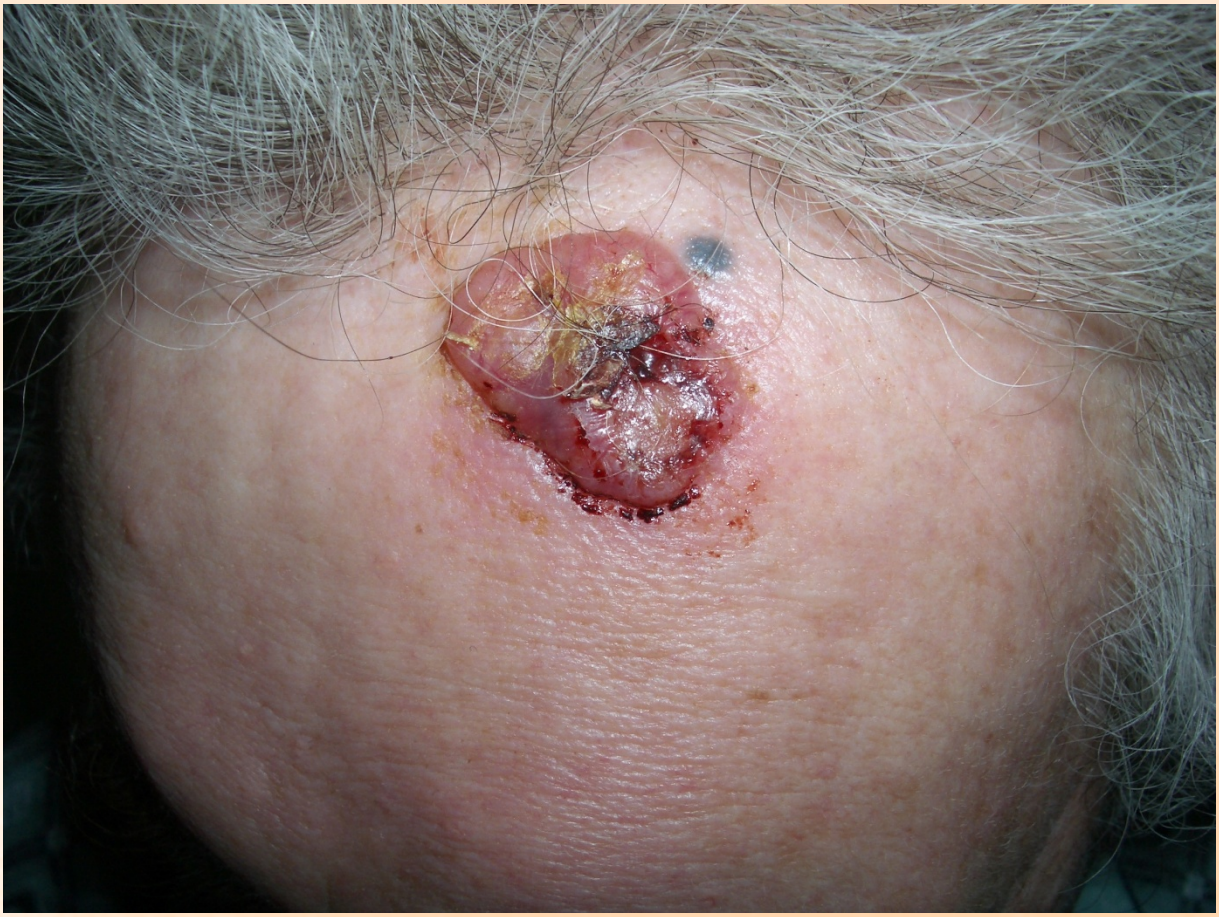
- ***The periosteum was removed in the central part of the large excision, where the nodular tumors infiltrated the scalp subcutaneous tissue; a galea scoring has been done in order to prevent suture tension and ischemia.***



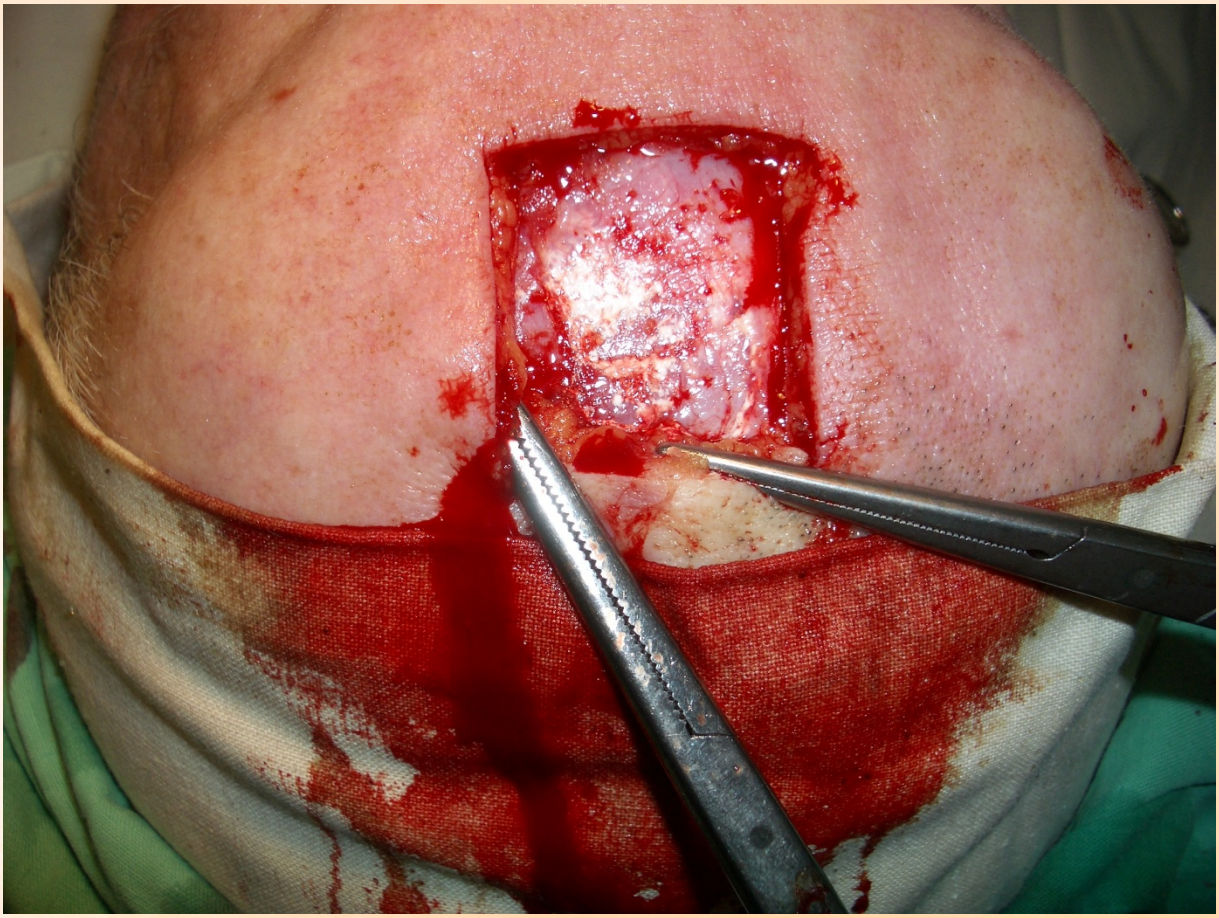
- ***Final aspect after scalp closure by interrupted 2/0 linen sutures; drainage was not necessary.***



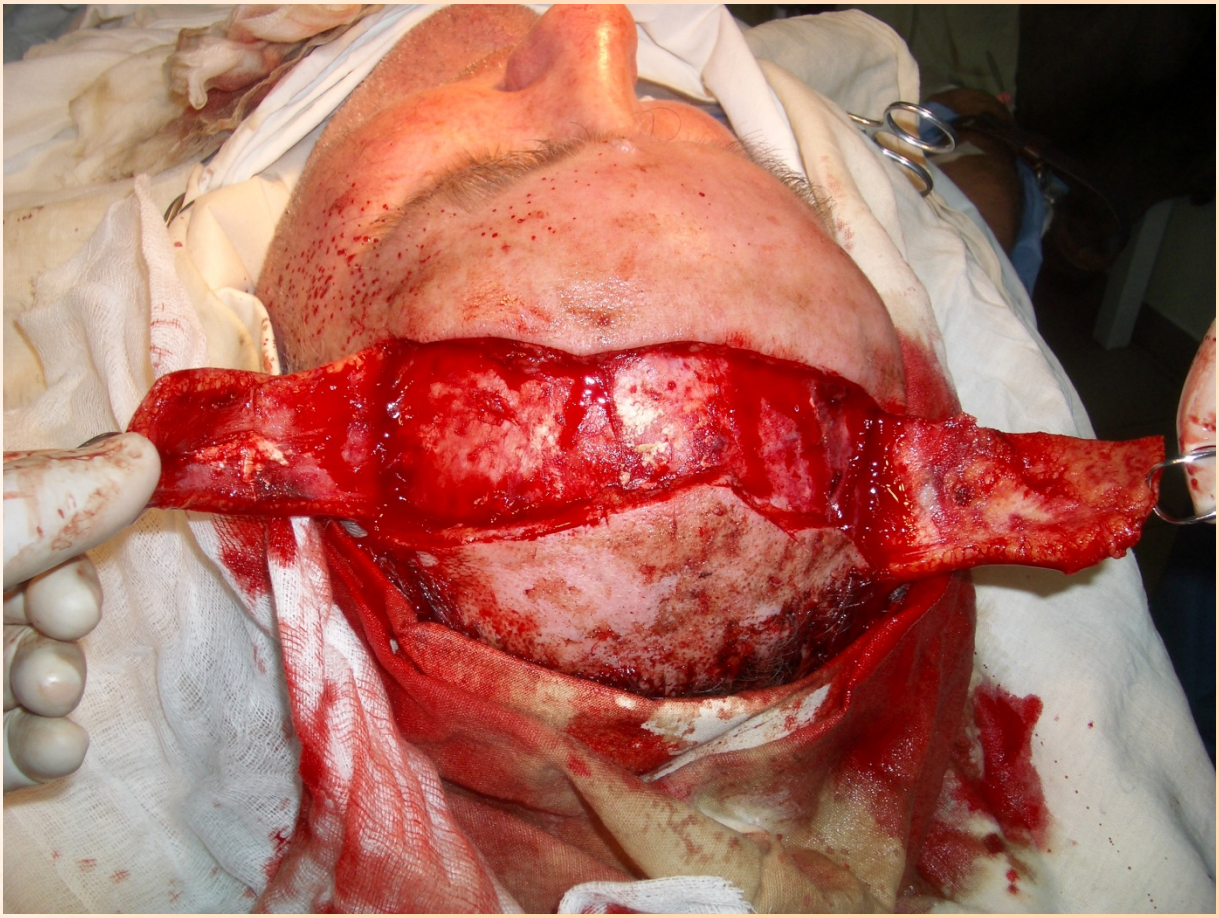
- ***A very good aspect can be seen one month later, with a very small superficial marginal necrosis of left inferior flap; this patient was eventually referred to the Oncologic Department for subsequent specialized treatment. No recurrence could be detected by the last follow-up about 6 months ago.***



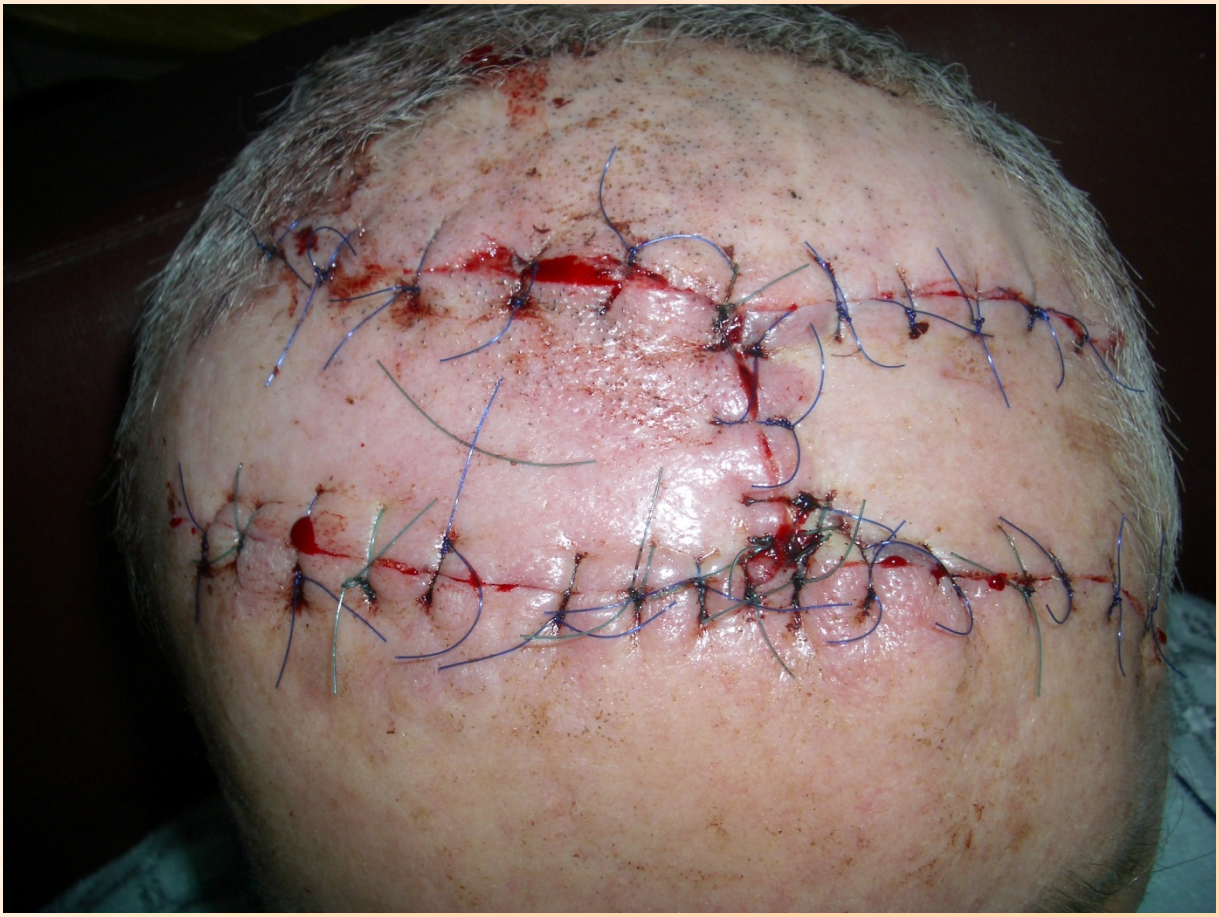
- ***CASE NR.4: 68 year old male patient with a large vegetant ulcerated BCC of the forehead.***



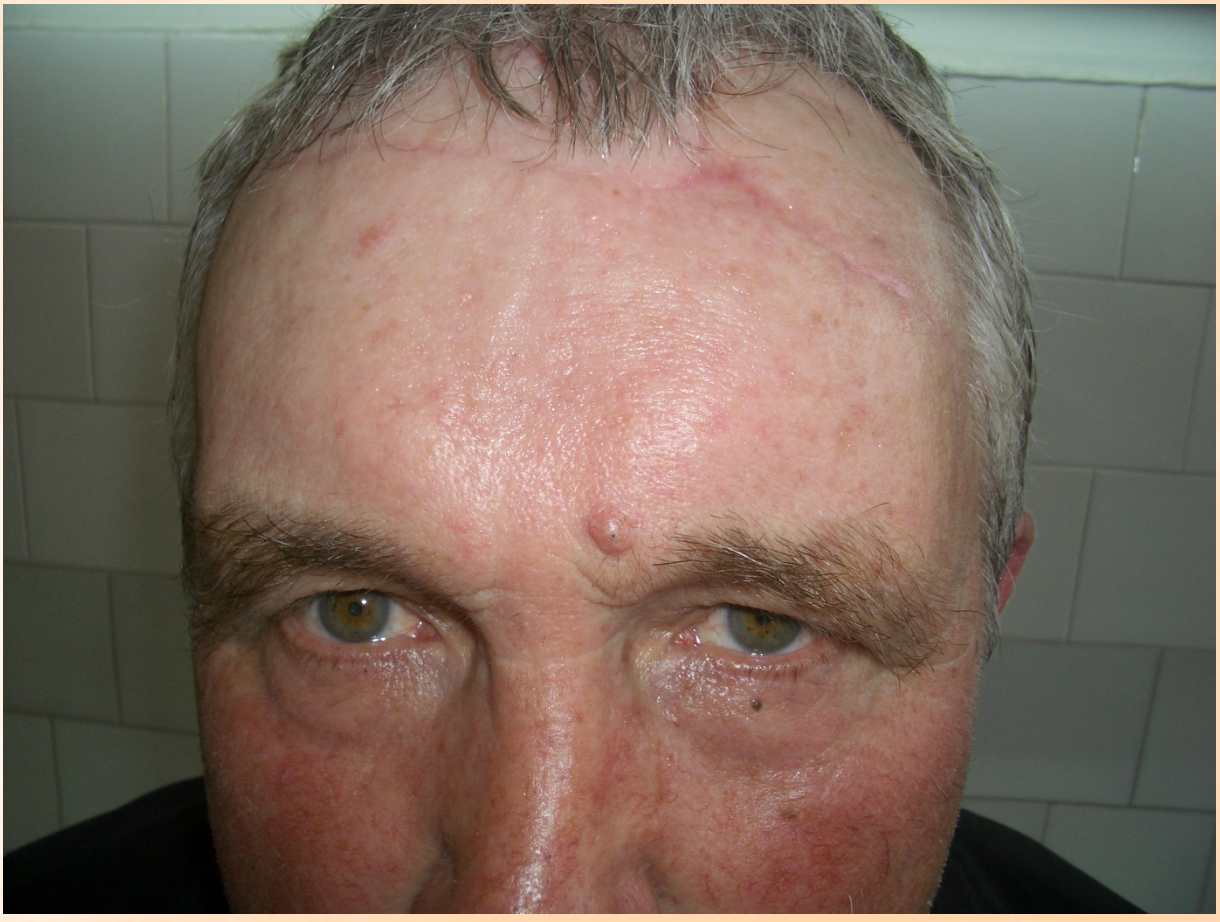
- ***Wide square excision was performed under general anesthesia (with about 1,5-2 cm safety oncologic margins); the periosteum was preserved this time because the tumor didn’t infiltrate the hypodermis.***



- ***Two large advancement flaps have been designed and harvested from the both sides of the forehead; galea scoring was performed, in order to relieve tension and to improve flaps orientation into the excisional defect.***



- ***The two flaps have been sutured by interrupted nylon sutures; wound drainage wasn't necessary.***



- ***Two months later the scar has an acceptable cosmetic aspect, with no important displacement of the eyebrows and the hair line (this procedure can be considered as an “oncologic forehead lifting”); the small nodular tumor above the inner part of the left eyebrow is an old dermatofibroma and the patient refused its excision in the same operation with the forehead BCC.***

- ***Conclusions:***
- ***large post-excisional defects in skin cancers surgery can be covered by adequate local either distant flaps with good functional and cosmetic results; thorough excision is always required (excisional margins free of tumor). Otherwise (when an early recurrence may be possible) skin grafting with STSG is still considered the best therapeutic option.***

- ***THANK YOU VERY MUCH FOR YOUR ATTENTION.***