From Skin Bank to scar formation of cadaveric skin transplanted in burn patients in Burn Centre of Turin by Anna Pensa

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In large burns the early excision is sometimes followed by coverage with alloplastic skin as temporary closure when autologous skin is not sufficient but also as surgical technique to verify the burn’s status. In many cases the sandwich technique was a valid option to complete a definitive coverage in line with a conservative use of available autologous skin. Aims of the study was to analyze the application and results of the use of alloplastic skin from coverage to scarring. We collect all the data of burn patients admitted in the Burn Centre of Turin from January 2015 until September 2017 (N=200). The majority was male (69%) and the median age was 56.6. The 62% had second-third degree full-thickness burn, in 44 patients the TBSA was from 20-40% in 20 was 40%. The overall mortality was 12%. The 64% had at least one surgical procedure. Fifty-seven patients were treated with alloplastic skin (total amount was 113.752cm2). In fourteen patients the coverage was performed by only alloplastic skin, in eleven cases by the sandwich technique and the thirty-two were treated with alloplastic skin followed by others surgical procedures. In the follow-up of 84 patients the rate of hypertrofic scar was 58%, normotrophic 32% and retractive-hypertrophic 10%. In patients treated with alloplastic skin the time from burn to operating theatre was (vs 11,1 days in patients treated with others techniques) and the hypertrofic scars occurred in 16 cases (vs 25). In conclusion in our population the use of alloplastic skin is non correlated to a major risk of hypertrofic scar but three will be probably useful larger study.