

Deltopectoral flap as a forgotten one : 30 cases

A. Methnani ¹, N. Salem ¹, A. Amri ¹, M. Dhaha ¹, R. Braham ¹, S. Jbali ¹, S. Dhambri ¹, K. Skander ¹.

¹Ent Carcinologic Head & Neck Surgery Department, Salah Azaiez Institute - Tunis

Abstract

Aim

This case series presents a DP flap technique to overcome the difficulty of tight closure or the need to graft the residual cutaneous defect.

Methods

This 5-year study (2019-2023) includes 30 patients who underwent DP flap reconstruction in the ENT and cervico-facial surgery department of the Salah Azaiez Institute

Results

30 patients underwent the procedure. Mean age of patients was 62 years with sex ratio of 29. The initial lesion was squamous cell carcinoma in all cases. They were located in the larynx in 67%, skin face in 10%, mandible in 13% and lips in 10% of cases. 30% of patients had a complication: necrosis in 44% of cases, infection in 22%, flap release in 12% and the association of infection and necrosis in 22%. DP flap was performed at the same time in 87% of cases and at a later stage in 13% of cases. Functional results were satisfactory in 70% of cases, with an average follow-up of 2 years.

Conclusion

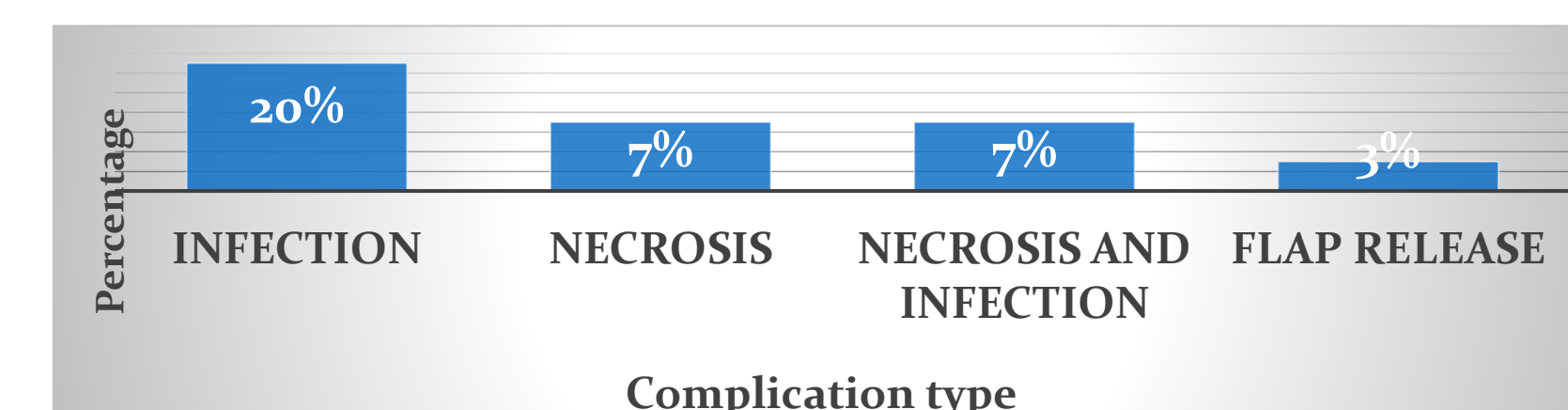
The DP flap was the flap of choice for the reconstruction of substances loss in the head and neck during the 1970s, but has been replaced by micro anastomosed free flaps. Although it may be the first choice in some situations loss of cervical substance, or to close pharyngeal fistulas, but it has become obsolete in modern surgery.

Results

- 30 patients : **39** men/ **1** woman
- **Average age : 62 years (extreme: 44 years ; 76 years).**
- **Habits :** smoking 29 cases(97%), alcoholism 10cases(34%), association (34%)
- **History :** High blood pressure (**5 cases**), Type 2 diabetes (**2 case**), Dyslipidemia (**2 cases**)
- **Initial site of tumor :** Laryngeal tumor **10 cases** (67%), Mandibular tumor **4 cases**(13%), Cutaneous tumor **3 cases**(10%), Lip tumor **2 cases**(7%), Inner side of cheek **1 case** (3%)
- **Histology : Squamous cell carcinoma : 100%**
- **ANATOMO-PATHOLOGY > MARGINS:** **Clean: 87%** , Invaded: 13%
- **REPAIR TIME :** **The same operating time: 87%** ; A second stage: 13%
- **POST-OPERATIVE FOLLOW-UP : Average hospital stay : 18 days (8-35 days).**

→SHORT-TERM POSTOPERATIVE COMPLICATIONS :

FLAP COMPLICATIONS 9 cases (30%);
DONNER SITE COMPLICATIONS 2 cases (6%)



Infection of the donor site



Necrosis of the DP flap



Flap release

→ FUNCTIONAL RESULTS :

- **Satisfactory in 70% of cases** → Average follow-up : **2 years** (1 and 5 years)
- **Flap withdrawal : 10 cases (33%)** → average length : **3 months** (2-4 months)
- **Flap degreasing : 3 cases (10%)**



Satisfactory functional result

Aim

To evaluate the **current contribution of the DP flap in head and neck** reconstruction.

Methods

This was a retrospective, descriptive study conducted in the ENT and cervico-facial surgery department of the Salah Azaiez Institute over a period of 5 years (2019-2023) and included patients who had undergone surgical reconstruction using a deltopectoral flap.

Conclusion

The DP flap was the flap of choice for the reconstruction of substances loss in the head and neck during the 1970s, but has been replaced by micro anastomosed free flaps. Although it may be the first choice in some situations loss of cervical substance, or to close pharyngeal fistulas, but it has become obsolete in modern surgery.

References

- [1] D, Carmo L, Melancia T, Zagalo C, Cid O, Rosa-Santos J. Head and neck cancer: a 5-year review in a tertiary referral centre. J Plast Reconstr Aesthet Surg. 2010 Dec;63(12)
- [2] Moore S, Johnson N, Pierce A, Wilson D. The epidemiology of HN cancer: a review of global incidence and aetiology. Oral Dis. 1999 Jul;5(3):185-95.
- [3] Dominguez-Gordillo A, Esparza-Gómez G, García-Jiménez B, Cerero-Lapiedra R, Casado-Gómez I, Romero-Lastra P, Warnakulasuriya S. The pattern of lip cancer occurrence over the 1990-2011 period in public hospitals in Madrid, Spain. J Oral Pathol Med. 2016 Mar;45(3):202-10
- [4] Warnakulasuriya S. Global epidemiology of oral and oropharyngeal cancer. Oral Oncol. 2009 Apr-May;45(4-5):309-16. doi: 10.1016/j.oraloncology.2008.06.002. Epub 2008 Sep 18. PMID: 18804401.
- [5] Vukadinovic M, Jezdic Z, Petrovic M, Medenica LM, Lens M. Surgical management of squamous cell carcinoma of the lip: analysis of a 10-year experience in 223 patients. J Oral Maxillofac Surg. 2007 Apr;65(4):675-9. doi: 10.1016/j.joms.2006.03.054. PMID: 17368363.