

SUMMARY AND CONCLUSIONS

The face is the window of the human emotion and self image to the world, and it is here that the first signs of aging appear. Facial rejuvenation surgery attempts to erase the visible signs of aging, thereby turning back the clock. Surgical rejuvenation of the aging face has evolved into one of the most frequently performed surgical procedures in the world. Face lifting, initially performed as a skin tightening procedure since the early 1900.

The MACS lift is a short scar face lift that elevates the deep tissues and skin using a vertical vector only. Sagging facial soft tissues are suspended with permanent or slowly resorbable purse-string sutures strongly anchored to deep temporal fascia through a preauricular and temporal prehairline incision.

The aim of this study was to evaluate the aesthetic and clinical results of the MACS lift and the need for additional procedures to improve these results.

This study was carried out on 20 cases suffering from various degrees of aging face admitted to the **Plastic and Reconstructive Surgery Unit of the Main Alexandria University Hospital** in the period from January 2012 to December 2013.

These 20 patients were suspected to pre-operative clinical and photographic assessment, followed by MACS-lift procedure of either one of its variants;

1. The simple MACS lift(S-MACS), where two purse-string sutures are placed for correction of the neck and the lower third of the face.

2. The extended MACS lift (E-MACS), where a supplementary third purse-string suture is placed to suspend the malar fat pad. This suture will have an extra effect on the nasolabial groove, the midface and the lower eyelid.

Other procedures including suction lipectomy of the neck, posterior cervicoplasty, and platysma-mastoid suture were done according to the patient clinical requirements.

The following results were obtained from this study:

All of the 20 patients included in this study were females. The mean age of the patients was 53 years, and ranging from 44-65 years.

The operative time in this study ranged from 2 to 3.15 hours with an average of 2.30 hours.

The hospital stay in this study ranged from 1 to 2 days with an average of 1.15 days.

The results of one-year post-operative follow up show;

- In the middle face region the overall mean improvement of the middle facial region of the 20 cases was about 70%.
- In the lower face region the overall mean improvement of the middle facial region of the 20 cases was about 84%.
- In the upper neck region the overall mean improvement of the middle facial region of the 20 cases was about 65%.

The results of scar assessment by both patients and doctors in our study shows that the scar in 95% of cases was found of excellent quality leaving no obvious sign that the patient underwent a face lifting procedure.

The results also show two patients suffered from complications; one patient suffered a small hematoma that was managed without sequel, and the other complication encounter by us was obvious or unsightly scar in another patient.

In conclusion the MACS-lift as a short-scar rhytidectomy technique can produce very pleasing and natural facial rejuvenation results through pure vertical shifting of facial deep tissues and skin. Morbidity and complication rate are very low, and the results seem to be stable over time. Both patient and surgeon satisfaction are high. On this basis, MACS-lifting with or without other procedures can be a valuable tool in a modern face-lift practice.

RECOMMENDATIONS

1. The facial rejuvenation should be patient oriented, tailored to the individual's problems, wishes, and needs.
2. Extension of follow up period of our cases for at least 5 years, together with increasing the number of patients would give us more data that could be helpful in improving our practice.
3. Future studies are needed to assess different procedures available for forehead correction, ranging from open forehead-plasty to endoscopic brow lift or limited incision temporal lifting techniques.
4. More studies are recommended to assess different periocular correction procedures.
5. Further research in the field of non-invasive facial rejuvenation techniques.

REFERENCES

1. Rogers BO: A brief history of cosmetic surgery. *Surg Clin North Am.* 1971; 51:265.
2. Rogers BO: The development of aesthetic plastic surgery: a history. *Aesthetic Plast Surg.* 1976; 1:3.
3. Gonzalez-Ulloa M: The history of rhytidectomy. *Aesthetic Plast Surg.* 1980;4:1.
4. Barton F Jr: Rhytidectomy. *Selected Readings in Plastic Surgery.* 1985;3.
5. Hollander E: *Die kosmetische Chirurgie.* In Joseph M, ed: Handbuch der Kosmetik. Leipzig, Verlag von Veit, 1912;688.
6. Lexer E: *Die gesamte Wiederherstellungs chirurgie*, vol 2. Leipzig, JA Barth, 1931;48.
7. Joseph J: Hangewangenplastik (Melomioplastik). *Dtsch Med Wochenschr.* 1921;47:287.
8. Miller CC: The excision of bag-like folds of skin from the region about the eye. *Med Brief.* 1906;34:648.
9. Miller CC: *the Correction of Featural Imperfections.* Chicago, Oak Printing Company, 1907.

10. Kolle FS : *Plastic and Cosmetic surgery*. New York, D. Appleton, 1911.
11. Passot R: *La chirurgie esthetique des rides du visage*. Presse Med (Paris) 1919;27:258.
12. Novel A: *La chirurgie esthetique: son role social*. Paris, Masson et Cie, 1926.
13. Bourguet J: Chirurgie esthetique de la face: lez nez conccaves, les reides et les "poches" sous les yeux. *Arch Prov Chir*. 1925;28:293.
14. Rees TD, Aston SJ. Blepharoplasty and facialplasty. In: *McCarthy JG (Ed.), Plastic Surgery*. Philadelphia, Saunders 1990;2320–2415
15. Burian F. Technik der Gesichtshautspannung. *Med Welt*. 1936;10:930.
16. Larson DL. An historical glimpse of the evolution of rhytidectomy. *Clin Plast Surg*. 1995;22(2):207–212.
17. Millard DR, Pigott RW, Hedo A: Submandibular lipectomy. *Plast Reconstr Surg*. 1968;41:513.
18. Pitanguy I, Ramos AS: The frontal branch of the facial nerve: the importance of its variations in face lifting. *Plast Reconstr Surg*. 1966;38:352.
19. Skoog T: *Plastic Surgery-New Methods and Refinements*. Philadelphia, WB Saunders, 1974.
20. Tessier P: Face lifting and frontal rhytidectomy. In Ely JF ,ed: *Transactions of the Seventh International Congress of Plastic and Reconstructive Surgery*, Rio de Janeiro. 1980;393.
21. Mitz V, Peyronie M: The superficial musculoaponeurotic system (SMAS) in the parotid and cheek area. *Plast Reconstr Surg*. 1976; 58:80.
22. Connel BF: Cervical lifts: The role of the platysma muscle flaps. *Ann Plast Surg*. 1978;5:29.
23. Owsley JQ Jr: Lifting the malar fat pad for correction of prominent nasolabial folds. *Plast Reconstr Surg*. 1993;91:463.
24. Lemmon ML, Hamra ST: Skoog rhytidectomy: a five-years experience with 577 patients. *Plast Reconstr Surg*. 1980;65:283.
25. Ramirez OM, Maillard GF, Musolas A: The extended subperiosteal facelift: a definitive soft tissue remodeling for facial rejuvenation. *Plast Reconstr Surg*. 1991;88:227.
26. Little JW: Three-dimensional rejuvenation of the midface: volumetric resculpture by malar imblication. *Plast Reconstr Surg*. 2000;105:267.
27. Vasconez LO, Core GB, Oslin B. Endoscopy in plastic surgery. An overview. *Clin Plast Surg*. 1995;22(4):585–589
28. Mendelson BC, Muzaffar AR, Adams WP. Surgical anatomy of the midcheek and malar mounds. *Plast Reconstr Surg*. 2002;110(3):885–96.

29. Stuzin JM, Baker TJ, Gordon HL. The relationship of the superficial and deep facial fascias: relevance to rhytidectomy and aging. *Plast Reconstr Surg*. 1992;89(3):441–9.
30. Massiha H. Short-scar face lift with extended SMAS platysma dissection and lifting and limited skin undermining. *Plast Reconstr Surg*. 2003;112(2):663–669.
31. Tonnard P, Verpaele A, Monstrey S, Van Landuyt K, Blondeel P, Hamdi M, Matton G. Minimal access cranial suspension lift: A modified S-lift. *Plast Reconstr Surg*. 2002;109(6):2074–2086
32. Saylan Z. The S-lift: Less is more. *Aesthet Surg J*. 1999;19:406
33. Gassner HG, Rafii A, Young A, Murakami C, Moe K, Larrabee WF. Surgical anatomy of the face. Implications for modern face-lift techniques. *Arch Facial Plast Surg*. 2008; 10(1):9–19.
34. Rohrich RJ, Pessa JE. The fat compartments of the face: anatomy and clinical implications for cosmetic surgery. *Plast Reconstr Surg*. 2007;119(7):2219–27.
35. Furnas DW. The retaining ligaments of the cheek. *Plast Reconstr Surg*. 1989;83(1):11–6.
36. Gardetto A, Dabernig J, Rainer C, Piegger J, Piza-Katzer H, Fritsch H. Does a superficial musculoaponeurotic system exist in the face and neck? An anatomical study by the tissue plastination technique. *Plast Reconstr Surg*. 2003;111(2): 664–72.
37. Ghassemi A, Prescher A, Riediger D, Axer H. Anatomy of the SMAS revisited. *Aesth Plast Surg*. 2003;27(4): 258–64.
38. Wobig JL, Dailey RA. Facial anatomy. In: Wobig JL, Dailey RA, editors. *Oculofacial plastic surgery*. New York: Thieme; 2004; 5.
39. Jones BM, Grover R. Anatomical considerations. In: Jones BM, Grover R, editors. *Facial rejuvenation surgery*. Philadelphia: Mosby Elsevier; 2008; 18–22.
40. Mendelson BC, Freeman ME, Wu W, Huggins RJ. Surgical anatomy of the lower face: the premaseter space, the jowl, and the labiomandibular fold. *Aesth Plast Surg*. 2008; 32(2):185–95.
41. Cardoso C. The anatomy of the platysma muscle. *Plast Reconstr Surg*. 1980;66(5):680–3.
42. Rohrich R, Arbique GM, Wong C, Brown S, Pessa JE. The anatomy of suborbicularis fat: implications for periorbital rejuvenation. *Plast Reconstr Surg*. 2009;124(3):946–51.
43. Larrabee WF, Makielski KH, Henderson JL. Cheeks and neck. In: Larrabee WF, Makielski KH, Henderson JL, editors. *Surgical anatomy of the face*. Philadelphia: Lippincott Williams & Wilkins; 2004; 178 -203.

44. Zide BM. ROOF and beyond (superolateral zone). In: Zide BM, editor. *Surgical anatomy around the orbit*. The system of zones. Philadelphia: Lippincott Williams & Wilkins; 2006; 57.
45. Zide BM. The facial nerve–cranial nerve VII. In: Zide BM, editor. *Surgical anatomy around the orbit*. The system of zones. Philadelphia: Lippincott Williams & Wilkins; 2005; 19.
46. Zide BM. Supraorbital nerve. Nuances/dissections from above. In: Zide BM, editor. *Surgical anatomy around the orbit*. The system of zones. Philadelphia: Lippincott Williams & Wilkins; 2006; 77.
47. Prendergast PM. Danger Zones in Surgical Facial Rejuvenation. In: Anthony E, Shiffman MA, editor. *Advanced Surgical Facial Rejuvenation*. Springer Berlin Heidelberg; 2012; 23-29.
48. Pitanguy I, Ramos AS. The frontal branch of the facial nerve: the importance of its variation in face lifting. *Plast Reconstr Surg*. 1966;38(4):352–6.
49. Tellioglu AT, Hosaka Y. Temporoparietal fascia plication in rhytidectomy. *Aesth Plast Surg*. 2006;30(2):175–80.
50. Toth BA, Daane SP. Subperiosteal midface lifting: a simplified approach. *Ann Plast Surg*. 2004;52(3):293–6.
51. Wilhelmi BJ, Mowlavi A, Neumeister MW. The safe face lift with bony anatomic landmarks to elevate the SMAS. *Plast Reconstr Surg*. 2003;111(5):1723–6.
52. Mowlavi A, Wilhelmi BJ. The extended SMAS facelift: identifying the lateral zygomaticus major muscle border using bony anatomic landmarks. *Ann Plast Surg*. 2004;52(4): 353–7.
53. Mendelson BC. Correction of the nasolabial fold: extended SMAS dissection with periosteal fixation. *Plast Reconstr Surg*. 1992;89(5):822–33.
54. Barton FE. Rhytidectomy and the nasolabial fold. *Plast Reconstr Surg*. 1992;90(4):601–7.
55. Dingman RO, Grabb WC. Surgical anatomy of the mandibular ramus of the facial nerve based on the dissection of 100 facial halves. *Plast Reconstr Surg*. 1962;29:266–72.
56. Daane SP, Owsley JQ. Incidence of cervical branch injury with “marginal mandibular nerve pseudo-paralysis” in patients undergoing face lift. *Plast Reconstr Surg*. 2003; 111(7):2414–8.
57. Tabatabai N, Spinelli HM. Limited incision nonendoscopic brow lift. *Plast Reconstr Surg*. 2007;119(5):1563–70.
58. Williams JV. Transblepharoplasty endoscopic subperiosteal midface lift. *Plast Reconstr Surg*. 2002;110(7):1769–75.
59. McKinney P, Katrana DJ. Prevention of injury to the great auricular nerve during rhytidectomy. *Plast Reconstr Surg*. 1980;66(5):675–9.

60. Berkovitz BKB, Moxham BJ. *Head and neck anatomy. A clinical reference*. Philadelphia: Taylor & Francis; 2002; 118.
61. Yousif NJ. Changes of the midface with age. *Clin Plast Surg*. 1995;22(2):213–226.
62. Ozerdem OR, Vasconez LO, de la Torre J. Upper face-lifting. *Facial Plast Surg Clin North Am*. 2006;14(3):159–165.
63. Hamra ST. Composite rhytidectomy. *Plast Reconstr Surg*. 1992;90(1):1–13.
64. Goldberg RA, McCann JD, Fiaschetti D, Ben Simon GJ. What causes eyelid bags? Analysis of 114 consecutive patients. *Plast Reconstr Surg*. 2005;115(5):1395–1402.
65. Aiache A, Ramirez OM. The suborbicularis oculi fat pads: an anatomic and clinical study. *Plast Reconstr Surg*. 1995;95(1):37–42.
66. Furnas DW. Festoons of orbicularis muscle as a cause of baggy eyelids. *Plast Reconstr Surg*. 1978;61(4):540–546.
67. Furnas DW. Festoons, mounds, and bags of the eyelids and cheek. *Clin Plast Surg*. 1993;20(2):367–385.
68. Gamboa-Bobadilla M, Ozerdem OR, Vasconez LO. Adjunctive surgical procedures to improve the facelift results. In: *Reoperative Aesthetic & Reconstructive Plastic Surgery*, Grotting JC (Ed.), Quality Medical Publishing, St. Louis, Missouri 2006;347–376.
69. Ozerdem OR, Andrades P, Vasconez L, de la Torre J. Anatomy and Surgical Approaches to the Midface Lift. IN: Shiffman MA, editor. *Simplified Facial Rejuvenation*. Springer Berlin Heidelberg; 2008;505-521.
70. Gonzales-Ulloa M. Facial wrinkles. Integral elimination. *Plast Reconstr Surg*. 1962;29:658–673.
71. De Cordier BC, de la Torre JI, Al-Hakeem MS, Rosenberg, LZ, Costa-Ferreira, A, Gardner, PM, Fix, RJ, Vasconez, LO. Rejuvenation of the midface by elevating the malar fat pad: review of technique, cases, and complications. *Plast Reconstr Surg*. 2002;110(6):1526–1536.
72. Owsley JQ. Platysma-fascial rhytidectomy: a preliminary report. *Plast Reconstr Surg*. 1977;60(6):843–850.
73. Hamra ST. The deep-plane rhytidectomy. *Plast Reconstr Surg*. 1990;86(1):53–61
74. Hamra ST. The tri-plane face lift dissection. *Ann Plast Surg*. 1984;12(3):268–274
75. Hamra ST. Repositioning the orbicularis oculi muscle in the composite rhytidectomy. *Plast Reconstr Surg*. 1992;90(1):14–22
76. Hamra ST. Arcus marginalis release and orbital fat preservation in midface rejuvenation. *Plast Reconstr Surg*. 1995;96(2):354–362
77. Connell BF, Semlacher R. Contemporary deep layer facial rejuvenation. *Plast Reconstr Surg*. 1997;100(6):1513–1523.
78. Stuzin JM, Baker TJ, Gordon HL, Baker TM. Extended SMAS dissection as an approach to midface rejuvenation. *Clin Plast Surg*. 1995;22(2):295–311.

79. Stuzin JM, Baker TJ, Baker TM. Refinements in face lifting: enhanced facial contour using vicryl mesh incorporated into SMAS fixation. *Plast Reconstr Surg*. 2000;105(1):290–301.
80. Jost G, Levet Y. Parotid fascia and face lifting: a critical evaluation of the SMAS concept. *Plast Reconstr Surg*. 1984;74(1):42–51.
81. Baker D. Rhytidectomy with lateral SMASectomy. *Facial Plast Surg*. 2000;16(3):209–213.
82. Tessier P. Subperiosteal face-lift. *Ann Chir Plast Esthet*. 1989;34(3):193–197.
83. Hinderer UT, Urriolagoitia F, Vildosola R. The blepharo- periorbitoplasty: Anatomical basis. *Ann Plast Surg*. 1987;18(5):437–453.
84. Psillakis JM, Rumley TO, Camargos A. Subperiosteal approach as an improved concept for correction of the aging face. *Plast Reconstr Surg*. 1988;82(3):383–394.
85. Ortiz-Monasterio, F. Aesthetic surgery of the facial skeleton: The forehead. *Clin Plast Surg*. 1991;18(1):19–27.
86. Ortiz Monasterio, F, Barrera G, Olmedo A. The coronal incision in rhytidectomy—the brow lift. *Clin Plast Surg*. 1978;5(1):167–179.
87. Paul MD, Calvert JW, Evans GR. The evolution of the midface lift in aesthetic plastic surgery. *Plast Reconstr Surg*. 2006;117(6):1809–1827.
88. Hester TR, Codner MA, McCord CD. The “centrofacial” approach for correction of facial aging using the transblepharoplasty subperiosteal cheek lift. *Aesthet Surg J*. 1996;16:51–58.
89. Hester TR, Codner MA, McCord C, Nahai F, Gianopoulos A. Evolution of technique of the direct transblepharoplasty approach for the correction of lower lid and midfacial aging: maximizing results and minimizing complications in a 5-year experience. *Plast Reconstr Surg*. 2000;105(1):393–406.
90. Gunter JP, Hackney FL. A simplified transblepharoplasty subperiosteal cheek lift. *Plast Reconstr Surg*. 1999;103(7):2029–2035.
91. Hobar PC, Flood J. Subperiosteal rejuvenation of the midface and periorbital area: a simplified approach. *Plast Reconstr Surg*. 1999;104(3):842–851.
92. Ortiz-Monasterio F. Discussion: The extended subperiosteal facelift: A definitive soft-tissue remodeling for facial rejuvenation. By Ramirez OM, Maillard GF, Musolas A. *Plast Reconstr Surg*. 1991;88(2):227–236. *Plast Reconstr Surg* 1991;88(2):237–238.
93. Heinrichs HL, Kaidi AA. Subperiosteal face lift: a 200-case, 4-year review. *Plast Reconstr Surg*. 1998;102(3):843–855.
94. Robbins LB, Brothers DB, Marshall DM. Anterior SMAS plication for the treatment of prominent nasomandibular folds and restoration of normal cheek contour. *Plast Reconstr Surg*. 1995;96(6):1279–1287.

95. Collawn SS, Vasconez LO, Gamboa M et al. Subcutaneous approach for elevation of the malar fat pad through a prehairline incision. *Plast Reconstr Surg*. 1996;97(4):836–841.
96. de la Torre JI, Rosenberg LZ, De Cordier BC, Gardner PM, Fix RJ, Vasconez LO. Clinical analysis of malar fat pad reelevation. *Ann Plast Surg*. 2003;50(3):244–248.
97. Byrd HS, Andochick SE. The deep temporal lift: a multiplanar, lateral brow, temporal, and upper face lift. *Plast Reconstr Surg*. 1996;97(5):928–937.
98. Finger ER. A 5-year study of the transmalar subperiosteal midface lift with minimal skin and superficial musculoaponeurotic system dissection: a durable, natural-appearing lift with less surgery and recovery time. *Plast Reconstr Surg*. 2001;107(5):1273–1283.
99. Sasaki GH, Cohen AT. Meloplication of the malar fat pads by percutaneous cable-suture technique for midface rejuvenation: outcome study (392 cases, 6 years' experience). *Plast Reconstr Surg*. 2002;110(2):635–654.
100. Sulamanidze MA, Fournier PF, Paikidze TK, Saulamanidze GM. Removal of facial soft tissue ptosis with special threads. *Dermatol Surg*. 2002;28(5):367–371.
101. Sulamanidze MA, Paikidze TK, Sulemanidze GM. Facial lifting with “APTOS” threads: featherlift. *Otolaryngol Clin North Am*. 2005;38(5):1109–1117.
102. Noone RB. Suture suspension malarplasty with SMAS placcation and modified SMASectomy: a simplified approach to midface lifting. *Plast Reconstr Surg*. 2006;117(3):792–803.
103. Saylan Z. Purse string-formed plication of the SMAS with fixation to the zygomatic bone. *Plast Reconstr Surg*. 2002;110(2):667–671.
104. Tonnard P, Verpaele A. 300 MACS-lift short scar rhytidectomies: analysis of results and complications. *Eur J Plast Surg*. 2005; 28: 198–205.
105. Tonnard P, Verpaele A, Gaia S. Optimising Results from Minimal Access Cranial Suspension Lifting (MACS-Lift). *Aesth Plast Surg*. 2005 29:213–220.
106. Ho T, Brissett AE. Preoperative assessment of the aging patient. *Facial Plast Surg*. 2006;22(2):85–90.
107. Hoefflin SM. Surgical pearls in the management of the aging face from A to Z. *Dermatol Clin*. 1997;15(4):679–85.
108. Springer RC. Rhytidectomy: from consultation to recovery. *Plast Surg Nurs*. 1996;16(1):27–30.
109. Marten TJ. Facelift. Planning and technique. *Clin Plast Surg*. 1997;24(2):269–308.
110. Ayalp TR. Topical tretinoin and smokers' face lifts. *Plast Reconstr Surg*. 1998;102(4):1294.
111. Rohrich RJ, Ghavami A, Lemmon JA, Brown SA. The individualized component face lift: developing a systematic approach to facial rejuvenation. *Plast Reconstr Surg*. 2009; 123(3):1050–63.

112. Tan SR, Glogau RG: Fillers esthetics. In: *Soft Tissue Augmentation*, Carruthers J, Carruthers A (Eds), Philadelphia, Elsevier 2005:8.
113. Alam M, DesJardin J, Arndt K, Dover JS, Hodapp RM, Baumann L, Brody HJ, Carruthers JB, Coleman EP 3rd, Garden JM, Geronemus RG, Glogau RG, Jacob CI, Katz BE, Klein AW, Krauss MC, Lawrence N, Moy RL, Narins RS, Sadick NS, Kaminer MS: A quality rating scale for aesthetic surgical procedures. *J Am Acad Dermatol*. 2006;54(2):272–281.
114. Silva HL. Fasil Scale: Measurement of Facial Skin and Soft-Tissue Laxity. IN: Shiffman MA, Mirrafati SJ, Lam SM (Editors), *Simplified Facial Rejuvenation*. Springer-Verlag Berlin Heidelberg. 2008; 5(II): 51-65.
115. Spencer KW. Patient education materials for facelifts and blepharoplasty. *Plast Surg Nurs*. 1995;15(1):45–7.
116. Destro MW, Speranzini MB, Cavaleiro Filho C, Destro T, Destro C. Bilateral haematoma after rhytidoplasty and blepharoplasty following chronic use of Ginkgo biloba. *Br J Plast Surg*. 2005;58(1):100–1.
117. Mottura AA. Face lift postoperative recovery. *Aesth Plast Surg*. 2002;26(3):172–80.
118. Camirand A., Doucet JA. Comparison between parallel hairline incisions and perpendicular incisions when performing a face-lift. *Plast Reconstr Surg*. 1997; 99:10.
119. Mottura AA. The Tumescant Technique for Facelift? *Plast Reconst Surg*. 1995; 96:231.
120. Hunstad JP. Tumescant and syringe liposculpture: a logical partnership. *Aesth Plast Surg*. 1995;19(4):321-33.
121. Tonnard P, Verpaele A. The Power of the Short-Scar Vertical Face Lift. In: Tonnard P, Verpaele A, (Editors), *Short-Scar Face lift: operative stratges and technique*. Quality Medical Publisher, St. Louis, Missouri; 2007; (1); 4-44.
122. Lassus C. Cervicofacial Rhytidectomy: The Superficial Plane. *Aesth Plast Surg*. 1997; 21:25–31.
123. Perkins SW, Willaims JD, Macdonald K, Robinson EB. Prevention of seromas and hematomas after face-lift surgery with the use of postoperative vacuum drains. *Arch Otolaryngol Head Neck Surg*. 1997;123(7):743–5.
124. Teimourian B, Mankani M, Stefan M. A new dressing technique to minimize ecchymoses following face lifts. *Plast Reconstr Surg*. 1995;96(1):222–3.
125. Basile AR, Basile FV. Transparent dressing for rhytidectomy. *Aesth Plast Surg*. 2001;25(6):454–6.
126. Baker DC. Minimal incision rhytidectomy (short-scar face lift) with lateral SMASectomy: evolution and application. *Aesthetic Surg J*. 2001; 21:14.

127. Pitman GH. Commentary on minimal incision rhytidectomy (short scar face lift) with lateral SMASectomy: evolution and application by Baker DC. *Aesthetic Surg J*. 2001;21:14.
128. Ramirez OM. Subperiosteal minimally invasive laser endoscopic rhytidectomy: the SMILE facelift. *Aesth Plast Surg*. 1996; 20:463.
129. Franco T: Face-lift stigmata. *Ann Plast Surg*. 1985;15:379.
130. Baker DC, Hamra ST, Owsley JQ, et al. Ten-years follow-up on the twin study. Presented at the *Annual Meeting of the American Society for Aesthetic Plastic Surgery*, New Orleans, April 2005.
131. Labbe' D, Franco RG, Nicolas J: Platysma suspension and Platysma-pexy during neck lift: Anatomical study and analysis of thirty cases. *Plast Reconstr Surg*. 2005; In press.
132. Matarasso A, Elkwood A, Rankin M, Elkowitz M: National plastic surgery survey: Face-lift techniques and complications. *Plast Reconstr Surg*. 2000; 106:1185.
133. Paul MD. Using barbed sutures in open/subperiosteal midface lifting. *Aesthetic Surg J*. 2006; 26:725-732.
134. Feldman JJ. Corset platysmaplasty. *Plast Reconstr Surg*. 1990; 85:333.
135. Rees A, Aston S. Complications of rhytidectomy. *Clin Plast Surg*. 1978; 5:109–119
136. Baker DC. Complications of cervicofacial rhytidectomy. *Clin Plast Surg*. 1983;10:543–562.
137. Grover R, Jones BM, Waterhouse N. The prevention of hematoma following rhytidectomy: a review of 1078 consecutive facelifts. *Br J Plast Surg*. 2001; 54(6):481–486.
138. Niamtu III J. Expanding hematoma in face-lift surgery: literature review, case presentations, and caveats. *Dermatol Surg*. 2005;31(9 Part 1):1134–44.

لوجه هو نافذة المشاعر الإنسانية و الصورة الذاتية للعالم الخارجي و فيه تظهر ال علامات الشيخوخة. تحول حوات تجديد لوجه ان تمحي العلامات الوثية للشيخوخة و بتالي إلي راجع الساعه إلي إراء. التجديد الحواحي لوجه قد تطور إلي واحد من اكثر الحوات تورا في العالم و هي حواحه شد لوجه التي اويت ابتدا من وائل القون العشوين علي هيئة احواء حواحي لشد جلد لوجه.

شد لوجه المحود المدخل ذو التعليق القحفي هو شد وجه ذو ندبه قصوه يقوم وفع الأنسجة العميقة و الجلد باستخدام وجه افقي فقط. حيث يتم تعليق انسجة لوجه المؤهله واسطة فزة سلسلة المحفظه الدائم او بطيئة الوبان المسبته بقوة في الوقه الصدغية العميقة من خلال حوح امام صوان الاذن و امام شعر الصدغ.

الهدف من هذه الواصله هو التقييم التجميلي و الاكلينيكي لشد لوجه المحود المدخل ذو التعليق القحفي و مدى الحاجة إلي احوئات حواحيه مكمله لتحسين النتائج.

هذه الواصله اويت علي 20 ورض يعلنون من وجات مختلفه من شيخوخه لوجه تم تم فحصهمو معالجتهم ، و متابعتهم في قسم حواحه التجميل و اعاده البناء في المستشفى لإئيسي جامعة الاسكنوية في الفرة من يناير 2012 إلي ديسمبر 2013.

تم فحص الرضي في فرة ما قبل الحواحه واسطه الفحص الاكلينيكي و الوقو حوافي ثم احواء حواحه شد لوجه المحود المدخل ذو التعليق القحفي واسطه واحدة من وعبها:

1. شد لوجه المحود المدخل ذو التعليق القحفي البسيطو فيه يستخدم فزتين سلسلة المحفظه لتصحيح لاقبه و الجزء السفلي من لوجه.

2. شد لوجه المحود المدخل ذو التعليق القحفي الممتدو فيه يستخدم فزة سلسلة المحفظه ثالثه لتعليق و سادة الدون لاجنيه. هذه الفزة لها تأثير إضافي علي الاخود الانفي-الفوي و منتصف لوجه و جفن العين السفلي.

الإحواءات الحواحيه الاخرى شملت شفت لدون لاقبه و شد لاقبه الخلفي و فزة العَصَلَةُ الجَدِيَّةُ للعُنُقُ إلي الخشاء و تم استخدمهمو فقا لإحتياجات الرضي الأكلينيكيه.

النتائج التاليه تم الحصول عليها واسطه هذه الواصله:

- جميع الرضي بهذه الواصله من الأناث. موسط اعمار الرضي هو 53 عاما و يتراوح بين 44-65 عاما.
- وقت العمليات في هذه الواصله يتراوح بين 2 إلى 3.15 ساعة و بموسط 2.30 ساعة.
- مدة الإقامة بالمستشفى تتراوح بين 1 إلى 2 يوم و بموسط 1.15 يوم.
- تظهر نتائج عام واحد من متابعة ما بعد الحواحه التالي:
- في منطقة منتصف لوجه بلغ موسط التحسن إلي 70%.
- في منطقة اسفل لوجه بلغ موسط التحسن إلي 84%.

- في منطقة اعلى لرقبه بلغ متوسط التحسن إلى 65%.

نتائج تقييم الندبه واسطه الوضى و الأطباء في هذه الواسه اظهرت ان في 95% من الحالات تتمتع بندبه ذات جودة ممتازة بون علامات واضحه ان الويض قد اوى جواحه شدوجه.

النتائج ايدا اظهرت عدد 2 وضى عانو من مضاعفات وهي: ويض واحد عانى من تجمع دهوي صغيرو تم علاجه بون اثار دائمه، و ويض الاخرى عانه من ندبه ظاهره.

في الخاتمه فان شد لوجه المحود المدخل ذو التعليق القحفي كاتقنيه لشد لوجه ذات ندبه قصوه يمكن ان يحقق نتائج و ضيه جدا و طبيعيه لتجديد لوجه من خلال نقل الانسجه العميقه و جلد لوجه في اتجاه افقي محض. الواسه اسبنتت سبات النتائج مع مورا لوقت و ان معدل المضاعفات قليل للغاية، و نسبه لاضاء عاليه بنسبه للوضى و الأطباء. و بناء عليه فان شد لوجه المحود المدخل ذو التعليق القحفي مع او بون اجراءات اخرى يستطيع ان يكون اداه قيمه في ممولسه شد لوجه الحديث.