Short Clinical Cases

7

Tradescantia flumiensis

Observe, record, tabulate, communicate. Use your five senses.
(William Osler)

M. F. Klaassen and E. Brown, *An Examiner's Guide to Professional Plastic Surgery Exams*, https://doi.org/10.1007/978-981-13-0689-1_7

7.1 Key Tips

1. Listen to the question
2. Do a limited examination depending on the question

In the FRACS exam for plastic surgery the six or more short cases carry equal significance with the two long cases. As with the long cases, it is essential that you pass this segment of the exam.

Over approximately 30 minutes you will be lead around these short cases and the rules of engagement are: that you make a *spot diagnosis* and demonstrate any relevant clinical signs. The two examiners then take turns to ask you specific questions about the case, usually clinical questions but not excluding anatomical, pathological and management issues. Over the years the sample and type of short cases can be predicted with some confidence but the local hospital institutions providing the cases can add variation to this (adult versus paediatric cases). As with the long cases, keep your answers to the questions brief and precise. Correct use of terminology, classification systems, anatomical descriptors is helpful and recommended.

Here are some common examples of short cases and recurring themes for this segment of the exam:

7.2 Case 01

*The left hand and right-dominant hand of a 48-year-old man, with Dupuytren's diathesis and a strong family history. He had a limited fasciectomy to the left hand 5 years ago and following recurrence, a radical dermo-fasciectomy 1 year ago (*Fig. 7.1*).*

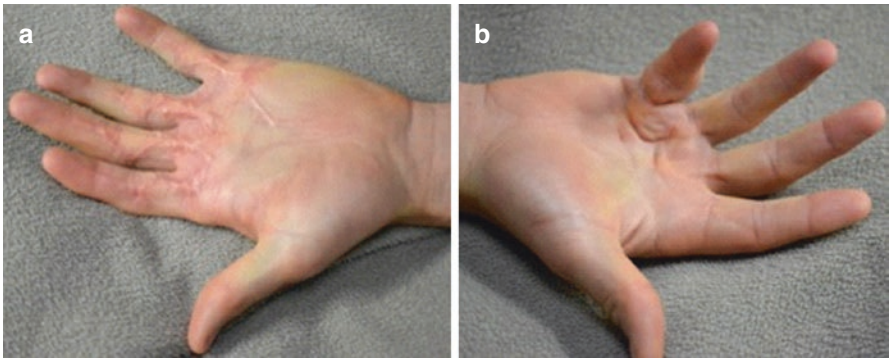

Fig. 7.1 (**a**) Left non-dominant hand of 48-year-old man, one year following radical fasciectomy for recurrent Dupuytren's contractures. (**b**) Right dominant hand of same man with recurrent flexion contractures of little, ring and middle fingers

This has given him reasonable left hand function but with hypertrophic scarring.

The dominant right hand has recurrent Dupuytren's nodules and bands to the little, ring and middle fingers with fixed flexion contractures and skin involvement to the MCPJ and PIPJ of the little finger.

The discussions and questions may cover:

Access incisions with Z-plasties, Bruner's zig-zag method, local keystone perforator flaps for skin defect closure, skin grafts, open-palm method of McCash, with secondary intention healing. Associated conditions with fibromatosis like Peyronie's (penis) and Ledderhose's (plantar fascia). Garrod's dorsal knuckle pads over the proximal inter-phalangeal finger joints, skin pits and indurated skin.

Aetiologies, diseased fibroblastic stem cells, risk factors, precise atraumatic dissection of the digital neurovascular bundles, limited versus radical fasciectomy, the role of fasciotomy and collagenase injection in selected cases for functional improvement.

Anaesthetic techniques—general versus regional anaesthetic.

Post-surgical splintage and early rehabilitation with expert hand therapists. Supporting the patient with wound care and encouragement during the early healing phases.

7.3 Case 02

*Pigmented and non-pigmented skin tumours in this same 69-year-old Caucasian woman living in a high sunlight region. The left scapular lesion shown in macro (*Fig. 7.2*a) and dermoscopic view (*Fig. 7.2*b) was confirmed as a superficial spreading malignant melanoma, Breslow thickness 0.6 mm with additional elements of* in-situ *melanoma. The pale nodule on the right mid helical rim (*Fig. 7.2*c) was an infiltrating basal cell carcinoma. The erythematous lesion lateral to the melanoma, just medial to her bra strap was also a BCC.*

Questions could be asked testing the knowledge of diagnostic accuracy, excision margins, staging, sentinel node biopsy indications, specific dermatoscopic features, repair of defect to avoid tension and hypertrophic scarring, follow-up management and reconstruction of the helical rim to avoid deformity.

7.4 Cases 03, 04, 05

*Three separate cases of congenital ear deformation. The first is a very prominent right ear due to relative unfolding of the antihelical fold. The second is cryptotia of the right ear where the upper pole is buried in the temporal scalp. The third is a double folding in the upper left helical rim with associated flattening. All three deformations were successfully treated with non-surgical ear moulding, which took from 4–12 weeks (*Fig. 7.3*).*

Fig. 7.2 (**a**) Shows gross images of melanoma left scapular region and (**b**), the dermatoscopic image of melanoma. (**c**) Shows an infiltrating non-pigmented BCC of her mid right helical rim

Fig. 7.3 (**a**) Shows a right prominent ear deformation in an infant, (**b**) is another type of deformation described as cryptotia (buried upper pole) and (**c**) is an example of kinked helical deformation

Ear moulding is very successful, particularly if applied early and ideally in the first 2 weeks of life. Twenty five percent of children who have normal looking ears at birth will develop prominent ears of varying severity. Up to 50% of babies may have some auricular deformation within 1 year of birth. Eighty six percent of ear deformations are noted by parents within the child's first 6 months of life.

Surgical otoplasty is not indicated until the child is at least 8 or 9 years of age and is motivated to have treatment. A general anaesthetic will be required for early surgical correction. Neonatal or infant ear moulding is cheap and easy, using lead-free soldering wire wrapped in Fixomull tape and fitted to the deformation with Steristrips or Micropore. Additional Fixomull is used to fix the splinted ear to the side of the head after limited hair removal. The splints are ideally changed every 2 weeks to check on skin hygiene. Commercial EarBuddies™ are also available.

7.5 Cases 06 and 07

*Large keloid scars following ear piercing. The first case had previously undergone debulking and intralesional steroid injections 10 years previously. The second case had been treated by excision and full thickness postauricular skin graft 3 years previously. The modern treatment for such disfiguring and severe keloid scars is intralesional cryotherapy using a special delivery probe called the Cryoshape. This can be performed under local anaesthetic and is basically a frostbite induced necrosis of the keloid scar. The degree and extent of freezing requires training and experience, to be effective and not permanently damage soft tissues near the keloid (*Fig. 7.4*).*

A discussion could ensue on the merits of the various techniques for management of keloids: intralesional steroid, excision and steroids, excision and radiation therapy, topical cryotherapy and finally the evidence for the efficacy of Cryoshape intralesional cryotherapy.

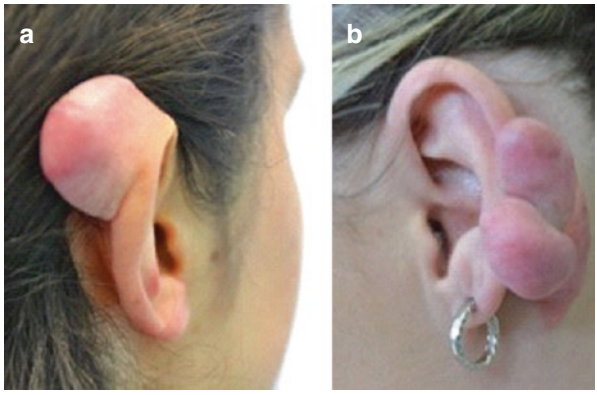

Fig. 7.4 (**a**) Is an example of a large recurrent keloid scar following ear-piercing. (**b**) Is a similar example of a keloid arising in an area of ear trauma

Fig. 7.5 (**a, b**) Show an 89-year-old lady before and after wide excision of multiple dysplastic SCC in-situ lesions involving her lateral cheeks, bilaterally. Repair with Flicklift advancement flaps

7.6 Case 08

An 89-year-old woman with lower eyelid laxity and retraction associated with severe photo-damage and a left lateral cheek complex of dysplastic actinic keratoses and multiple areas of squamous cell carcinoma in situ*. There is adequate lower face and neck skin laxity to achieve closure of the expected left cheek wound following surgical excision, but could this be combined with a lateral canthoplasty to reposition the lax lower eyelid? (*Fig. 7.5*).*

Discussions could develop with the differential diagnosis of the skin tumours (note also the actinic keratotic plaque on the dorsum nose) and also the various aetiologies of ectropion: senile, cicatricial and post-surgery. Inadvertent inferior tension on the lateral cheek skin could aggravate the lower lid ectropion. There also seems to be left facial asymmetry due either to a cerebrovascular incident or perhaps to previous skin tightening for a similar complex lesion on her contralateral cheek.

7.7 Case 09

A 55-year-old former rugby player with chronic subluxation of the proximal interphalangeal joint of his left non-dominant hand, resulting from recurrent dislocations including a compound dislocation. The PIPJ is permanently deviated 45 degrees in the ulnar direction and has almost 90 degrees of mal-alignment on

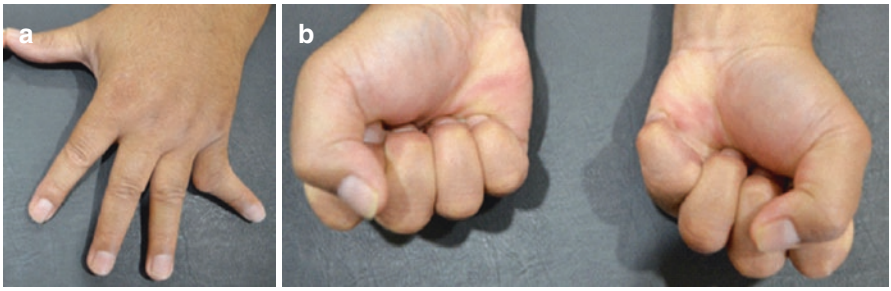

Fig. 7.6 (**a, b**) Show the chronically subluxing PIPJ of this 55-year-old former rugby player's left little finger. Compare his left little finger posture on making a fist, with his right hand

*making a fist. The joint itself is stable and all the flexor and extensor tendons are functioning. Sensation and circulation are also normal (*Fig. 7.6*).*

Is amputation a treatment option? What are the advantages and disadvantages?

A discussion on the best management plan would seem obvious. The current position of his little finger interferes with his ability to work without the risk of further injury. The options that could be considered are reconstructive arthroplasty versus functional arthrodesis, depending on bone stock and radiological status of the joint surfaces. Fusion in 40° of flexion after corrective osteotomies and fixation with a 3D miniplate and screws via a dorsal approach was the solution.

7.8 Case 10

*This 59-year-old woman presents with an infiltrating BCC of her right nasal supratip. Biopsy excluded morphoeic features. Wide excision with a 3–5 mm margin is indicated respecting the nasal aesthetic subunits to achieve an aesthetic reconstruction according to the principle of CLEAR (refer Chap. 5). The predicted surgical defect overlaps the dorsum and right lateral sidewall subunits. Reconstructive options include a full thickness preauricular skin graft or a local nasoaxial advancement flap (based on left or right paranasal pedicle) with or without conservative reduction of the cartilaginous dorsum and large lateral alar crura. The introduction of aesthetic elements to the repair to achieve easier closure is a delicate issue, which requires a careful and respectful conversation. In this case the patient was delighted to combine her skin cancer removal with a conservative tip rhinoplasty. NB also shave excision of benign intradermal naevi (*Fig. 7.7*).*

Skin cancers on the nose are common and this important landmark should be reconstructed with expertise to avoid disfigurement. A discussion could ensue on the merits of skin grafts versus local flaps, the role of Moh's surgery if any, and the problems seen with various bilobed and other poorly designed flaps, that disregard the aesthetic nasal subunits.

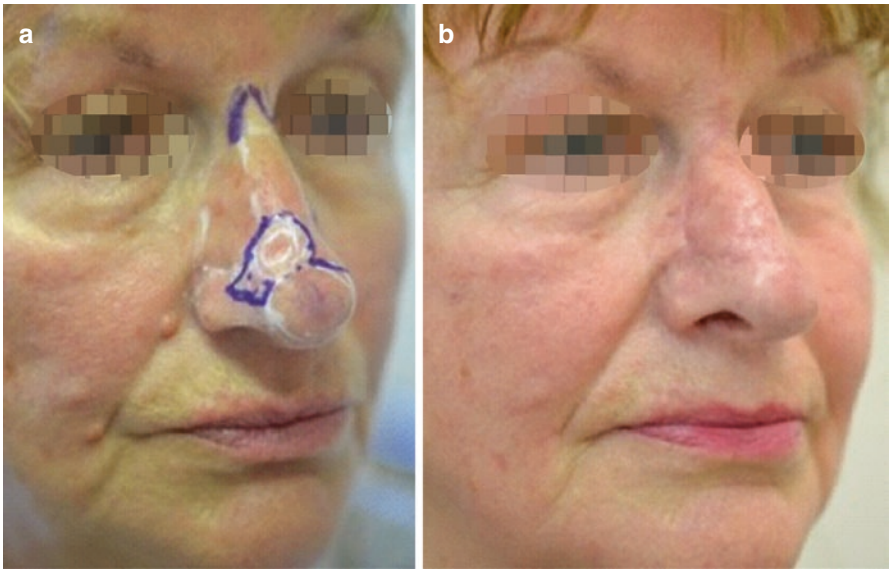

Fig. 7.7 (**a**) Shows a morphoeic infiltrating BCC of this 59-year-old woman's right nasal supratip / dorsum. (**b**) Shows the early result following wide excision and nasoaxial V-Y advancement local flap reconstruction