| Vascular Surgery PBA: Carotid endarterectomy APPROVED SURGICAL TEMPLATE Jun 06 updated 10.07 | | | | | | | |
|-----------------------------------------------------------------------------------------------|-----------------|---------------------------------------|---------|--|--|--|--|
| Trainee: | Assess | or: | Date: | | | | |
| Assessor's Position*: | Email (i | nstitutional): | GMC No: | | | | |
| Duration of procedure (mins): | | Duration of assessment period (mins): | | | | | |
| Operation more difficult than usual? Yes / No (If yes, state reason) | | | | | | | |

IMPORTANT: The Trainee should explain what he/she intends to do throughout the procedure. The Assessor should provide verbal prompts if required, and intervene if patient safety is at risk.

Rating:

N = Not observed or not appropriate

D = Development required

S = Satisfactory standard for CCT (no prompting or intervention required)

| | Competencies and Definitions | Rating N/D/S | Comments |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|
| 1. | Consent | | |
| C1 | Demonstrates sound knowledge of indications and contraindications including alternatives to standard CEA e.g. medical therapy, stenting or eversion endarterectomy | | |
| C2 | Demonstrates awareness of sequelae of operative or non operative management | | |
| C3 | Demonstrates sound knowledge of complications of CEA | | |
| C4 | Explains the procedure to the patient / relatives / carers and checks understanding | | |
| C5 | Explains likely outcome and time to recovery and checks understanding | | |
| II. | Pre operative planning | | |
| PL1 | Demonstrates recognition of anatomical and pathological abnormalities (and relevant comorbidities) and selects appropriate operative strategies / techniques to deal with these | | |
| PL2 | Demonstrates ability to make reasoned choice of appropriate equipment, materials or devices (if any) taking into account appropriate investigations (e.g. angiograms) | | |
| PL3 | Checks materials, equipment and device requirements with operating room staff | | |
| PL4 | Ensures the operation side is marked | | |
| PL5 | Checks patient records, personally reviews investigations | | |
| III. | Pre operative preparation | | |
| PR1 | Checks in theatre that consent has been obtained | | |
| PR2 | Gives effective briefing to theatre team, including anaesthetist | | |
| PR3 | Ensures proper and safe positioning of the patient's head on the operating table | | |
| PR4 | Demonstrates careful preparation of skin of neck | | |
| PR5 | Demonstrates careful draping of the operative field, ensuring comfort of patient if awake | | |
| PR6 | Ensures general equipment and materials are deployed safely (e.g. diathermy) | | |
| PR7 | Ensures appropriate drugs administered (e.g. cervical block) | | |
| PR8 | Arranges for and deploys specialist equipment (e.g. TCD) effectively | | |
| IV. | Exposure and closure | | |
| E1 | Demonstrates knowledge of optimum skin incision anterior to sternomastoid, and approach to carotid artery (ante or retrojugular) | | |

^{*} Assessors are normally consultants (senior trainees may be assessors depending upon their training level and the complexity of the procedure)

| | Competencies and Definitions | Rating N/D/S | Comments |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------|
| E2 | Achieves an adequate exposure through purposeful dissection in correct tissue planes, identifies all structures correctly and supplements LA as required, if patient awake | | |
| E3 | Completes a sound wound repair, with good skin apposition, after careful haemostasis | | |
| E4 | Protects the wound with dressings and inserts drain safely, where appropriate | | |
| V. | Intra operative technique: global (G) and task- specific items (T) | | |
| IT1(G) | Follows an agreed, logical sequence or protocol for the procedure | | |
| IT2(G) | Consistently handles tissue well with minimal damage | | |
| IT3(G) | Controls bleeding promptly by an appropriate method | | |
| IT4(G) | Demonstrates a sound technique of knots and sutures/staples | | |
| IT5(G) | Uses instruments appropriately and safely | | |
| IT6(G) | Proceeds at appropriate pace with economy of movement | | |
| IT7(G) | Anticipates and responds appropriately to variation e.g. anatomy | | |
| IT8(G) | Deals calmly and effectively with unexpected events/complications | | |
| IT9(G) | Uses assistant to the best advantage at all times and asks for help when required | | |
| IT10(G) | Communicates clearly and consistently with the scrub nurse | | |
| IT11(G) | Communicates clearly and consistently with the anaesthetist | | |
| IT12 (T) | Exposes internal jugular vein, ligates and divides facial veins (antejugular approach) or slings jugular vein (retrojugular approach) | | |
| IT13 (T) | Retracts internal jugular vein to expose common carotid artery and positions retractors to obtain good exposure without damaging veins | | |
| IT14 (T) | Continues dissection superiorly to expose both ICA and ECA branches | | |
| IT15 (T) | Extends dissection up internal carotid artery to healthy artery (blue sign) and deals safely with any small vessels limiting access at this level | | |
| IT16 (T) | Identifies and preserves X and XII nerves | | |
| IT17 (T) | Controls/slings arteries without distortion or undue manipulation of bifurcation | | |
| IT18 (T) | Asks anaesthetist to administer appropriate dose of IV heparin | | |
| IT19 (T) | Clamps arteries in correct sequence (internal carotid first) and observes patient's conscious level or other monitoring (e.g. TCD) to decide whether shunt required | | |
| IT20 (T) | Achieves clean arteriotomy, extending beyond level of disease proximally and distally, if possible | | |
| IT21 (T) | Inserts shunt safely without delay, if required, and checks that it is functioning | | |
| IT22 (T) | Develops endarterectomy plane in CCA, and transects plaque cleanly in proximal CCA | | |
| IT23 (T) | Extends plane distally, performing complete endarterectomy of ECA origin | | |
| IT24 (T) | Avoids flaps or dissection in distal ICA by feathering plaque, or uses tacking sutures, or extends dissection and arteriotomy more distally | | |
| IT25 (T) | Corrects excessive tortuosity of ICA by plication or excision, if required | | |
| IT26 (T) | Checks for loose debris and removes any with pledget or forceps | | |
| IT27 (T) | Closes arteriotomy with sound eversion technique by direct closure or patch as appropriate (knows when to use patch) | | |
| IT28 (T) | Removes shunt safely (if used), backbleeds arteries and flushes well with hepsal. | | |
| IT29 (T) | Declamps arteries in correct sequence (ICA backbled first and released last) | | |
| IT30 (T) | Ensures there is no excessive bleeding, narrowing or kinking of arteriotomy | | |
| IT31 (T) | Checks patient's neurological status and takes appropriate action if any concern | | |
| VI. | Post operative management | | |
| PM1 | Ensures the patient is transferred safely from the operating table to bed | | |
| PM2 | Constructs a clear operation note | | |
| PM3 | Records clear and appropriate post operative instructions | | |
| PM4 | Not applicable to t he procedure | | |

Global summary

| | Tick as appropriate | |
|---------|--------------------------------------------------------------------------------------------|--|
| Level 0 | Insufficient evidence observed to support a summary judgement | |
| Level 1 | Unable to perform the procedure, or part observed, under supervision | |
| Level 2 | Able to perform the procedure, or part observed, under supervision | |
| Level 3 | Able to perform the procedure with minimum supervision (needed occasional help) | |
| Level 4 | Competent to perform the procedure unsupervised (could deal with complications that arose) | |

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|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|---------------------|------------|------------|--------------------------|---------------------------------|------------|----------|------------|------------|----------|
| Comments by Assessor (including strengths and areas for development): | | | | | | | | | | | | |
| Comments by Trainee: | | | | | | | | | | | | |
| Trainee | Signature: Assessor Signature: | | | | | | | | | | | |
| Assessor | training? No□ Written Not at a | | Web/CD ☐ Workshop ☐ | | | | Time taken for feedback (mins): | | | | s): | |
| | atisfaction with PBA satisfaction with PBA | | 1 1 | 2 <u> </u> | 3 <u> </u> | 4 <u> </u> 4 <u> </u> | 5 🗌 5 🔲 | 6 <u> </u> | 7 7 | 8 <u> </u> | 9 🗌 9 🗎 | 10 10 |