

## **International Council of Ophthalmology's Ophthalmology Surgical Competency Assessment Rubric (ICO-OSCAR)**

The International Council of Ophthalmology's "Ophthalmology Surgical Competency Assessment Rubrics" (ICO-OSCARs) are designed to facilitate assessment and teaching of surgical skill. Surgical procedures are broken down to individual steps and each step is graded on a scale of novice, beginner, advanced beginner and competent. A description of the performance necessary to achieve each grade in each step is given. The assessor simply circles the observed performance description at each step of the procedure. The ICO-OSCAR should be completed at the end of the case and immediately discussed with the student to provide timely, structured, specific performance feedback. These tools were developed by panels of international experts and are valid assessments of surgical skill.

### **ICO-OSCAR Instructor Directions**

1. Observe resident surgery.
2. Ideally, immediately after the case, circle each rubric description box that you observed. Some people like to let the resident circle the box on their own first. If the case is videotaped, it can be reviewed and scored later but this delays more effective prompt feedback.
3. Record any relevant comments not covered by the rubric.
4. Review the results with the resident.
5. Develop a plan for improvement (e.g. wet lab practice/tips for immediate next case).

#### Suggestions:

- If previous cases have been done, review ICO-OSCAR data to note areas needing improvement.
- If different instructors will be grading the same residents, it would be good that before starting using the tool they grade together several surgeries from recordings, so they make sure they are all grading in the same way.

## ICO-Ophthalmology Surgical Competency Assessment Rubric: Anterior Approach Ptosis Surgery

Date:

Resident:

Evaluator:

		<b>Novice (score = 2)</b>	<b>Beginner (score = 3)</b>	<b>Advanced Beginner (score = 4)</b>	<b>Competent (score = 5)</b>	<b>Not applicable. Done by preceptor (score = 0)</b>
1	Draping	Unable to start draping without help / Unsure of technique or location of drape placement / Inappropriate draping causing undue tension or distortion of the surgical field / Sterile field not adequately covered	Drapes only with direct instruction and guidance / Some inadvertent tension or distortion of the surgical field / Sterile field poorly or incompletely covered	Drapes with adequate consideration of the operative field and ensures both eyes are visible / Sterile field mostly covered but some non-sterile areas exposed	Drapes quickly and meticulously keeping the operative field clear / No undue tension or distortion of the surgical field / Sterile field adequately covered	
2	Lid crease marking	Not aware of the accurate landmarks for incision / Needs instructions for marking / Marks the skin crease incorrectly / Asymmetrical or inappropriate location / Fails to place mark before anesthesia	Marks with hesitation and with errors corrected only by instruction / Fails to properly consider the contour or height in comparison with contralateral eyelid / Smears skin crease marking	Marks without hesitation / Gets the contour and height broadly correct but with either a degree of asymmetry, loss of contour or height	Marks accurately with contour and height matching correctly in the first attempt without need for instruction	
3	Local anesthetic infiltration	Injects into the incorrect plane, causing hematoma, tissue distortion and/or loss of tissue planes / Inadequate anesthesia leading to patient discomfort / Hazardous approach with needle angulation / Not aware of the concentration and volume to be injected	Unsure of the tissue planes or location of injection / Gross tissue distortion / Inadequate anesthesia but manages with instruction	Starts injecting into the wrong plane / Inadequate anesthesia but realizes and corrects spontaneously without instruction	Injects an appropriate volume safely into the correct plane / Maintains adequate anesthesia	
4	Eyelid skin crease incision	Inappropriate incision depth / Hesitant or incomplete cuts / Ragged incision edges / Multiple incisions / Loss of incision plane / Drift of incision off the marked axis	Inconsistent depth, plane, length of incision or does not follow surgical marking / Unable to spontaneously identify the mistake but is able to correct with instruction	Manages to get the correct depth on the first attempt but inconsistent plane, length of incision or does not follow surgical marking / Able to identify the mistake and correct spontaneously or with minimal instruction	Achieves the appropriate depth on the first attempt / Incision is uniform and made in one stroke/pass / Incision follows marked axis	
5	Dissection into the sub orbicularis plane	Hesitant dissection / May make several planes of dissection / Unable to reach the tarsal plate without assistance	Dissection performed in a slow and hesitant manner / Unsure of the dissection plane or unable to progress through the dissection without direct instruction	Difficulty in achieving the plane initially but once found able to dissect accurately / When the plane of dissection is incorrect it is identified and corrected spontaneously or with minimal instruction	Accurate dissection in the correct plane / Finds the plane quickly and confidently	

6	Raising skin-orbicularis flap / Clearing the Tarsus	Cannot identify the plane between orbicularis, septum and tarsus / Inadequate knowledge of anatomy	Dissection performed in a slow and hesitant manner / Makes multiple cuts / Incises the orbicularis directly causing excessive bleeding / Inadvertently opens septum	Identifies correct plane between orbicularis and septum with a few hesitant attempts / Identifies incorrect dissection plane and corrects spontaneously or with minimal instruction / Good tarsal exposure with only minimal residual areas of adhesion	Correct plane between the orbicularis and the tarsus identified / Tarsus is fully and adequately cleared for suture placement	
7	Opening of the orbital septum	Unable to identify or misidentifies the septum / Septum opened incompletely / Inadequate knowledge of anatomy / Collateral damage to levator muscle during the dissection process / Failure to look for the pre-aponeurotic fat pad	Requires multiple attempts to identify the septum or can only identify the septum with guidance and supervision / Septum opened incompletely / Failure to look for pre-aponeurotic fat pad	Able to identify the and fully open septum with minimal guidance / Incomplete opening of septum and corrects spontaneously or with minimal instruction / Checks for the pre-aponeurotic fat pad	Identifies the orbital septum spontaneously / Opens septum fully and appropriately / Checks for the pre-aponeurotic fat pad	
8	Identification of levator muscle aponeurosis	Unable to identify the levator aponeurosis / Unaware of the surgical landmarks including the relation to the pre-aponeurotic fat pad / Transects the muscle inadvertently during dissection / Causes collateral damage or a through and through cut	Identifies levator aponeurosis only with instruction / Unclear of the full anatomical relationships of the levator muscle, the pre-aponeurotic fat pad and Muller's muscle / Locates levator muscle only with repeated instruction to patient to move eyes up and down / Causes some damage during dissection	Identifies levator aponeurosis with some instruction / Partially completes dissection of the correct structures but with incomplete knowledge of the surgical dissection planes / Needs guidance to locate and dissect levator muscle with heavy fatty degeneration / Causes mild damage during dissection	Identifies the levator aponeurosis and Whitnall's ligament spontaneously / Checks for adequate disinsertion / No guidance needed to locate and dissect levator muscle with heavy fatty degeneration / No damage during dissection	
9	Separation of the levator aponeurosis from the underlying Muller's muscle and conjunctiva (posterior dissection)	Unable to identify plane between the posterior belly of the levator, Muller's muscle and conjunctiva / Causes significant trauma, excessive bleeding and/or chemosis during dissection / Damages or buttonholes the muscle or conjunctiva	Able to identify the posterior dissection plane only with instruction / Damages or buttonholes the muscle or conjunctiva	Able to identify posterior dissection plane with minimal guidance / Occasional collateral damage or wrong plane dissection but is able to identify and correct spontaneously or with minimal instruction / Near full release of the levator from the conjunctival - Muller's plane	Able to identify posterior dissection plane spontaneously and without guidance / Full dissection with no collateral damage to surrounding tissue	

10	Placement of sutures through tarsus and levator	Difficulty with suture mounting and placement / Incorrect placement of sutures on the tarsus or incorporates fat/septal tissue inadvertently / Fails to recognize sutures passing through and through the tarsus	Able to mount and place sutures only with guidance / Identifies failure to place sutures in the correct location on the tarsus only with guidance / Identifies inadvertent incorporation of fat/septal tissue only with guidance / Identifies sutures passing through and through the tarsus only with guidance	Able to mount and place sutures with minimal instruction / Identifies and corrects failure to place sutures in the correct location on the tarsus spontaneously or with minimal instruction / Identifies and corrects inadvertent incorporation of fat/septal tissue spontaneously or with minimal instruction / Identifies and corrects sutures passing through and through the tarsus spontaneously or with minimal instruction	Correctly places suture(s) through aponeurosis / Accurately judges the location of central anchoring suture / Places the tarsal suture(s) at the appropriate depth and width	
11	Lid height and contour adjustment	Repeatedly attempts to adjust height and/or contour unsuccessfully / Inappropriate placement of temporary or permanent sutures or incorporation of tissue limiting the height and contour adjustment / Inappropriate number of sutures placed / Residual eyelid notching or flare which goes unrecognized	Successful adjustment of height and/or contour with temporary sutures only under instruction / With prompting recognizes and corrects inappropriate placement of sutures or incorporation of tissue limiting the height and contour of the eyelid under instruction / Inappropriate number of sutures placed corrected only with instruction / Checks eyelid position in down gaze with prompting / Residual eyelid notching or flare recognized and corrected with significant instruction	Successful adjustment of height and/or contour with temporary sutures under minimal instruction / Recognition of inappropriate placement of sutures or incorporation of tissue limiting the height and contour adjustment with minimal instruction / Appropriate number of sutures placed correctly with only occasional instruction / Checks eyelid position in down gaze spontaneously / Recognition of residual eyelid notching or flare - corrects with instruction	Spontaneously achieves accurate height and good contour comparable to other eyelid with appropriate placement and number of temporary and permanent sutures / Checks eyelid position in down-gaze spontaneously / Corrects any residual eyelid notching or flare spontaneously	
12	Placement of eyelid crease reforming sutures	Difficulty with suture mounting and placement / Incorrect placement of sutures / Incorporates inappropriate tissue (such as septum) / Fails to incorporate appropriate tissue (such as bites of the levator aponeurosis) / Unclear on techniques to accentuate or minimize skin crease reformation	Able to mount and place sutures only with guidance / Identifies incorrect placement of sutures or the incorporation of inappropriate tissue (such as septum) only with guidance / Partial knowledge of techniques to accentuate or minimize skin crease reformation	Able to mount and place sutures with minimal guidance / Occasionally places sutures incorrectly or places sutures incorporating inappropriate tissue (such as septum) and corrects spontaneously or with minimal instruction / Good knowledge of techniques to accentuate or minimize skin crease reformation	Successful suture handling and placement without guidance / Incorporates correct tissue / Good knowledge of techniques to accentuate or minimize skin crease reformation	

13	Eyelid skin closure suturing	Difficulty with suture mounting and placement / Incorrect placement of sutures / Incorporates inappropriate tissue (such as septum) / Unclear on techniques to accentuate or minimize skin scar / Poor suture placement leading to poor wound apposition or inappropriate alignment of layers	Able to mount and place sutures only with guidance / Identifies incorrect placement of sutures or the incorporation of inappropriate tissue (such as septum) only with guidance / Partial knowledge of techniques to accentuate or minimize skin scar / Inconsistent tension, spacing and size of sutures	Able to mount and place sutures only with guidance / Occasionally places sutures incorrectly or places sutures incorporating inappropriate tissue (such as septum) and corrects spontaneously or with minimal instruction / Good knowledge of techniques to accentuate or minimize skin scar / Places sutures at correct entry angle, depth and spacing to achieve good wound apposition with minimal guidance	Successful suture handling and placement without guidance / Incorporates correct tissue / Good knowledge of techniques to accentuate or minimize skin scar / Well opposed wound	
14	Knowledge of instruments	Poor knowledge of the names, usage and handling of surgical instruments and tools / Poor knowledge of the different suture material types and their appropriate use / Poor knowledge of suture knots, techniques and their applicability in different portions of the operation	Some knowledge of the names, usage and handling of surgical instruments and tools / Some knowledge of the different suture material types and their appropriate use / Some knowledge of suture knots, techniques and their applicability in different portions of the operation / Requires significant supervisor input	Working knowledge of the names, usage and handling of surgical instruments and tools / Working knowledge of the different suture material types and their appropriate use / Working knowledge of suture knots, techniques and their applicability in different portions of the operation / Requires some supervisor input	Good knowledge of the names, usage and handling of surgical instruments and tools / Good knowledge of the different suture material types and their appropriate use / Good knowledge of suture knots, techniques and their applicability in different portions of the operation / No supervisor input required	
15	Flow of the procedure	Poor knowledge of the procedural steps / Poor forward planning / Hesitation between steps / Repetition of actions and inefficiencies / Grossly protracted operative time	Some knowledge of the procedural steps / Some forward planning / Some hesitation between steps / Some repetition of actions and inefficiencies / Operative time lengthened / Requires significant supervisor input to improve flow	Working knowledge of the procedural steps / Largely forward plans but has some hesitation between steps / Occasional repetition of actions and inefficiencies / Operative time may be slightly lengthened / Requires occasional supervisor input to improve flow	Good knowledge of the procedural steps / Forward plans appropriately without hesitation or inefficiencies / Appropriate operative time for procedure / No supervisor input required	

16	Hemostasis	Poor understanding of hemostasis and hemostatic control / Inappropriate over or under use of cautery / Excessive bleeding or hematoma / Allows bleeding to grossly obscure the surgical field while continuing with operation / Unable to identify and control source of bleeding without help	Some understanding of hemostasis and hemostatic control / Some over or under use of cautery / Some excessive bleeding or hematoma / Allows bleeding to obscure the surgical field during parts of the procedure / Identifies and controls source of bleeding only with direct supervision	Working understanding of hemostasis and hemostatic control / Avoids over or under use of cautery with some supervision / Can spontaneously identify excessive bleeding or hematoma with some supervision / Occasional bleeding obscuring the surgical field but able to identify and correct with some supervision / Identifies and controls source of bleeding with some supervision	Good knowledge of hemostasis with pre-emption of bleeding / Competent control of sources of bleeding with appropriate use cautery, minimal pain and damage to surrounding tissue with no guidance required / Surgical field remains clear of blood throughout procedure
17	Tissue Handling	Poor and traumatic tissue handling / Collateral damage and injury to skin or deeper tissue / Repeated grasping and regrasping of tissue	Traumatic tissue handling avoided only with supervision / Collateral damage and injury to skin or deeper tissue avoided only with supervision / Repeated grasping and regrasping of tissue avoided only with supervision	Some traumatic tissue handling, collateral damage and injury to skin or deeper tissue but able to address spontaneously or with minimal supervision / Some grasping and regrasping of tissue, but able to address spontaneously or with minimal supervision	Good tissue handling throughout procedure / No inadvertent or unnecessary collateral damage or injury

Comments:

---



---



---