Coding Reassessment for Complex Retinal Detachment Repair

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INTRODUCTION

In a recent vitreo-retinal surgical coding course, the subject of what constitutes a complex retinal detachment repair evolved into a robust discussion regarding the criteria as set forth in the Current Procedural Terminology (CPT) definition. It was agreed that it was time for a discussion of the code and what types of surgery were intended to qualify a case as being coded complex.

HISTORICAL DEVELOPMENT

In 2008 new vitrectomy codes were established in CPT and a new code for complex retinal detachment repair was initiated. Here is the new code description that was effective January 1, 2008 and has remained unchanged since that time:

67113 Repair of complex retinal detachment (eg, proliferative vitreoretinopathy, stage C-1 or greater, diabetic traction retinal detachment, retinopathy of prematurity, retinal tear of greater than 90 degrees), with vitrectomy and membrane peeling, may include air, gas, or silicone oil tamponade, cryotherapy, endolaser photocoagulation, drainage of subretinal fluid, scleral buckling, and/or removal of lens

Prior to this a combination of CPT codes 67108 and 67038 was used:

67108 Repair of retinal detachment; with vitrectomy, any method, including, when performed, air or gas tamponade, focal endolaser photocoagulation, cryotherapy, drainage of subretinal fluid, scleral buckling, and/or removal of lens by same technique

67038 *Vitrectomy, mechanical, pars plana approach; with epiretinal membrane stripping*

Technically, CPT code 67038 was replaced with three codes in 2008:

- **67041** *Pars plana vitrectomy; with removal of preretinal cellular membrane (eg, macular pucker)*
- **67042** Pars plana vitrectomy; with removal of internal limiting membrane of retina (eg, for repair of macular hole, diabetic macular edema), includes, if performed, intraocular tamponade (ie, air, gas or silicone oil)
- **67043** Pars plana vitrectomy; with removal of subretinal membrane (eg, choroidal neovascularization), includes, if performed, intraocular tamponade (ie, air, gas or silicone oil) and laser photocoagulation

CPT code 67043 was fairly obsolete by the time the code was issued. New technologies fostered the development of the use of various anti-VEGF drugs administered by intravitreal injection. The CPT system was slower in getting codes into the system and codes issued in 2008 would have started their development in 2005—about the time that Rosenfeld et al published the first proposal for using bevacizumab (Avastin) for treating wet macular degeneration (proceeded by the use of Macugen).^{1,2, 3}

The remaining two codes were regarded as being used for removal of epiretinal membrane (67041) and removal of internal limiting membrane for repair of macular hole and diabetic macular edema (67042). Since the words "epiretinal membrane" and "preretinal cellular membrane/macular pucker" appeared in both codes 67038 and 67041 respectively, it was widely interpreted that use of the complex code for retinal detachment repair consisted of the combination of retinal detachment repair with epiretinal membrane peeling. This became the standard replacement for 67108 + 67038. It is important to note that both CPT codes 67041 and 67042, as well as 67043, were to be considered as replacements for 67038.

DISSECTION/INTERPRETATION OF THE CODE

Examples Incorporated in the Code Description. The examples

with interpretative comments as warranted are:

- Proliferative vitreoretinopathy, stage C-1 or greater
- Diabetic traction retinal detachment
- Retinopathy of prematurity
- Retinal tear of greater than 90 degrees

Mandatory surgical techniques in the Code Description.

- Vitrectomy
- Membrane peeling

Comment: Due to the origin of the code 67113 being 67108 + 67038 this has been widely interpreted as epiretinal membrane peeling. I would like to suggest that this encompasses all types of membrane peeling and also includes repair of macular hole. Thus, according to the CPT code descriptor the two mandatory techniques are a pars plana vitrectomy for repair of a retinal detachment and some type of membrane peeling. Peeling of the hyaloid membrane is usually performed as part of the repair of a retinal detachment procedure and does not qualify as a mandatory technique. I have seen a very few rare exceptions to this.

May include the following surgical techniques (not mandatory).

- air, gas, or silicone oil tamponade
- cryotherapy
- endolaser photocoagulation
- drainage of subretinal fluid
- scleral buckling
- and/or removal of lens

Comment: Techniques used in a surgical case from this category, with rare exceptions, should not and cannot be coded separately and are bundled together in the National Correct Coding Initiative (NCCI).

CASE STUDIES

Case 1

History: A rhegmatogenous retinal detachment in the left eye had previously been repaired using silicone oil and now it needed to be removed. In the global period, the patient (Type 2 Diabetes Mellitus) presented with proliferative diabetic retinopathy with macular edema, tractional retinal detachment, retained silicone oil and posterior synechiae in the right eye. Surgery consisted of PPV, membrane peeling, posterior synechiolysis, anterior chamber washout and endolaser.

Operative notes: "...Iris hooks were placed one at each limbus. Healon was used to viscodissect the iris off of the anterior capsule of the lens. A second port was placed 3mm posterior to the limbus supero-nasally. The silicone oil was aspirated from the vitreous cavity. The extrusion cannula was placed into the AC and used to washout the retained silicone oil from the AC. A third vitrectomy port was placed supero-

temporally. There was a very strong, tense white membrane across the posterior pole causing a tractional retinal detachment. This membrane was segmented and delaminated as possible. Air fluid exchange was performed. Endolaser was applied inferiorly..."

Diagnoses:

1. E11.3521 Type 2 DM with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye

2. H43.311 Vitreous membranes and strands, right eye

3. H21.541 Posterior synechiae, right eye

4. T85.698A Other mechanical complication of other specified internal prosthetic devices, implants and grafts

5. Z98.89 Personal history of surgery, not elsewhere classified

CPT CODE	MODIFIER S	ICD-10-CM CODE(S)
67113 Repair of complex retinal detachment with vitrectomy and membrane peeling	-58-RT	1, 2, 3, 5
67121 Removal of implanted material, posterior segment; intraocular	-51-58-RT	4, 5
65920 Removal of implanted material, anterior segment of eye	-51-58-RT	4, 5

Tips:

• Modifier 58 is used to engender payment in the global period since a greater procedure (67113) is being performed after a lesser one (67108). If the coding of the prior case was 67113, then you would use modifier 78. Modifier 58 pays 100% of the allowable and a new global period begins; modifier 78 pays 70% of the allowable and the global period remains intact.

• The complex repair code mandates use of membrane peeling. Without it CPT code 67113 cannot be used.

• More and more anterior segment surgery is being performed along with posterior segment surgery. The silicone oil had migrated to the anterior chamber so 65920 is used for its removal and CPT code 67121 is used for the removal from the posterior segment.

Case 2

History: The patient presented outside of the global period of a previous retinal detachment surgery with a combined tractional and rhegmatogenous retinal detachment and proliferative vitreoretinopathy in the left eye. Surgery consisted of PPV with repair of combined

tractional and rhegmatogenous retinal detachment, membrane peeling, endolaser, anterior chamber tap, 15% C3F8 gas fill.

Operative notes: "...Closed vitrectomy was carried out under wide field visualization. The retina was detached temporally and there were fixed folds across the macula and inferiorly. There was a round break superiorly.

Perfluron was placed over the optic disc and brought to up to the posterior edge of the posterior most break. Care was taken to ensure good disc perfusion and a lack of a rise in intra-ocular pressure. Intraocular forceps were used to peel the proliferative tissue from the surface of the macular and then the fixed folds inferiorly. No new retina breaks were encountered. Further vitrectomy and subsequent air/fluid exchange was performed above the perfluoron bubble. The perfluoron bubble was exchanged for air. Endolaser was applied 360 degrees between the ora and the equator with care taken to surround the retinal break. There was a mild hyphema which had settled on the lens, a 25 gauge needle was placed in the AC from the temporal limbus and used to aspirate some of this blood..."

Diagnoses:

1. H33.42 Traction detachment of the retina, left eye

2. H33.012 Retinal detachment (rhegmatogenous) with single break, left eye

3. H21.02 Hyphema, left eye

4. Z98.89 Personal history of surgery, not elsewhere classified

CPT CODE	MODIFIER S	ICD-10-CM CODE(S)
67113 Repair of complex retinal detachment with vitrectomy and membrane peeling	-LT	1, 2, 4
65815 Paracentesis of anterior chamber; with removal of blood, with or without irrigation and/or air injection	-51-LT	3, 4

Tips:

• Most of the procedures are bundled under the NCCI and cannot be coded additionally.

Case 3

History: The patient presented with Type I Diabetes Mellitus with proliferative diabetic retinopathy with macular edema in the left eye. There was also a tractional retina detachment, epiretinal membrane formation and a non-clearing vitreous hemorrhage in the left eye. Surgery consisted of PPV with repair of tractional retinal detachment, epiretinal membrane peeling, removal of the internal limiting membrane and endolaser application.

Operative notes: "...Closed vitrectomy was carried out. The anterior hyaloid was aspirated and removed from the posterior aspect of the lens to clear the vitreous hemorrhage within the vitreous. This cleared the visual axis. There was no damage to the lens. Further vitrectomy was performed to relieve traction between areas of vitreous and neovascularization. Bands between areas of neovascularization were cut with the vitrector. Once all of the surface traction had been relieved, ICG dye was placed on the macula and irrigated out. The epiretinal membrane which was creating folds in the macula was grasped with ILM forceps and circumferentially peeled. The traction from the central macula was relieved. The internal limiting membrane was similarly removed. Examination of the retinal periphery using wide field visualization found no new retinal breaks. Air fluid exchange was performed. Endolaser was applied to the periphery..."

Diagnoses:

1 E10.3522 Type 2 DM with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye

- 2. H35.372 Puckering of macula, left eye
- 3. H43.12 Vitreous hemorrhage, left eye

CPT CODE	MODIFIER S	ICD-10-CM CODE(S)
67113 Repair of complex retinal detachment with vitrectomy and	-LT	1, 2, 3
membrane peeling		

REFERENCES

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