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Introduction

Perhaps the most important point to emphasize when discussing the topic of revisional surgery for otoplasty is prevention. It is much more complicated to revise an unwanted result than getting it right the first time around. Of course, that principle can likely be applied to all aspects of surgery. But, this chapter would be amiss if it did not mention some important points about prevention. Importantly, the goal in otoplasty is to pin back the ears to the degree that the patient desires. This could be variable based on for whom you are performing the otoplasty. So a generous discussion with your patient is paramount in deciding just how much setback they are wanting. If you do not talk to your patients, it does not matter how well you do the otoplasty; you might still be wrong if you do not achieve what they want. So our discussion again goes back to prevention. Find out what your patient wants and document it. You will then have a better chance of making them happy. There are ideals in the literature, however. This is likely going to be covered in other chapters. But based on the author's theory on aesthetics [1], the ears should protrude about one iris width from the side of the head. One and a half iris widths of ear protrusion is probably the upper

extreme of normal; anything more than that would be interpreted by the viewer as excessive. Most people like their ears protruding about an iris width without them knowing how the author's theory applies to ear aesthetics. In addition, if there is any way that you would choose to skew whether the upper, middle, or lower third is more protruding, it is always better to allow the upper third to protrude the most then middle and then lower in that order (Fig. 55.1).

This chapter is based strongly on the author's experience but is undoubtedly influenced by a gestalt created by extensive background reading. In the video case a specific case will be illustrated that carries with it some of the more extreme techniques that are needed in an otoplasty revisional case.

General Prevention and Personal Thoughts on Otoplasty and the Revisional Approach

The upper third of the ear is the area that is most likely to recur following an otoplasty. It has been found that the relapse of this area is most likely due to loosening of the sutures. There may not be something that can be done about recurrence in this area, but these are some points that can be suggested. A 4-0 Mersilene is likely the most common suture to be used in Mustarde-type sutures (Fig. 55.2) [2, 3] for reconstruction of the superior crus of the anti-helix. The benefit of this suture is the braided,

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Fig. 55.1 Overcorrected ear. The ear is barely visible. In the middle and lower thirds, only 2–4 mm of ear is showing lateral to the side of the face. The superior third is showing approximately 8–9 mm. From the frontal view, you should be able to see the helix, and the antihelix should be more medial than the helix

nonabsorbable qualities that prevent pull-through and absorption of the suture. This suture has a long history of success among surgeons who perform otoplasty. Because braided sutures are more likely to get infected, 4-0 clear nylon is used as do many surgeons currently. Although this suture is more likely to pull through, the author concentrates on getting full-thickness bites including the perichondrium when performing Mustarde sutures. With 4-0 Mersilene, the closer you are to the skin surface, the greater is the possibility of issues such as infection, suture abscesses, and rejection of the suture. An erroneous approach to the upper third is to depend on the Mustarde sutures to do most of the pinning back of the ears. The fault here is that when Mustarde sutures are

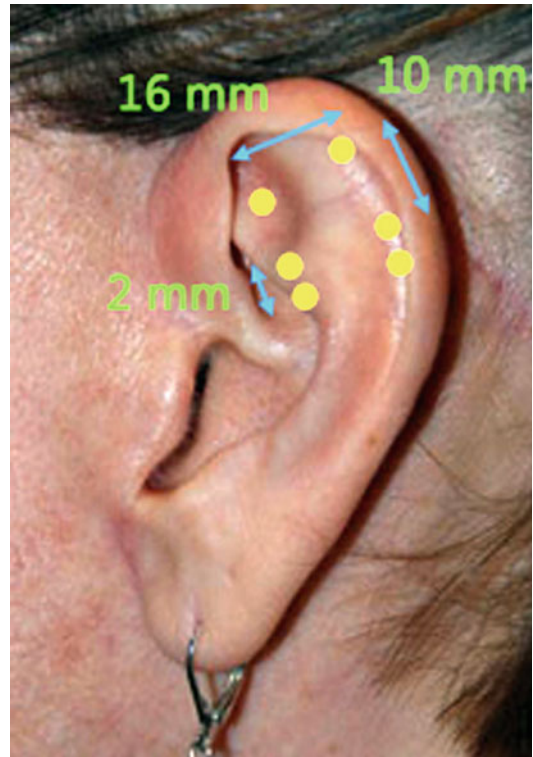


Fig. 55.2 The Mustarde sutures. The markings for the Mustarde sutures are 16 mm apart across the width of the superior crus of the antihelix. They are 10 mm apart lengthwise. The next horizontal mattress sutures are set 2 mm from the previous one. These numbers can vary depending on the person and the shape that you want to achieve

relied on more than other techniques, one often tends to set back the helical rim so that the antihelix covers the helix on frontal view. This situation does not represent the ideal. This can be a telltale sign of a poor and unthoughtful otoplasty. It is much better to rely more on the conchal setback (Fig. 55.3) [4] to mostly pin back the ears and more of a subtle bend and creation of the antihelix that can give a more natural look. With that approach, the recreated antihelix has less pressure placed on it by the sutures and is thus less likely to be affected by pull-through of the sutures and recurrence of the prominent upper third. Also you are more likely to have a better result where the helix is positioned more laterally than the antihelix.

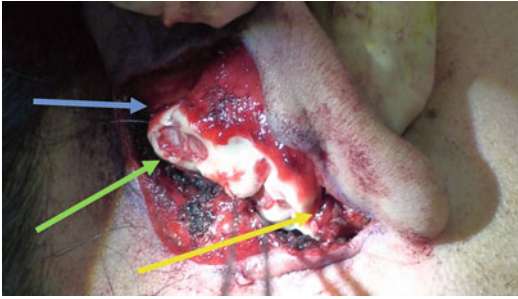


Fig. 55.3 Conchal setback. The 15 blade can be directed at the concha and specifically address each quadrant of the ear. This is done incrementally and reassessed to assure the most perfect amount of setback. The *green arrow* indicates the area that has been shaved. The *blue arrow* shows the direction and exposure that you must approach and achieve to medialize the superior third. The *yellow arrow* indicates the exposure you need to achieve to treat the inferior strut of the conchal bowl to medialize this area

Conchal Setback and Mustarde Sutures Specifics

Start out the otoplasty with the conchal setback [4], then shave the back of the concha with the 15 blade to weaken the concha. This is done from upper third to lower third. Most of the setback is achieved when the 15 blade is concentrated over the struts that actually protrude the ear. Wide exposure is key to allow you to weaken the upper and lower third, not just the middle third. In Fig. 55.3, the blue and yellow areas indicate the areas that require more exposure to approach the upper and lower third supporting struts of the concha that need to be weakened to medialize these quadrants. This is done in a gradual manner to achieve just the right amount of total ear setback with the goal being the patient's desired amount of setback. In Fig. 55.3, the green arrow shows the area that has been shaved. In actuality, the shaving of the concha need not be so extensive that the other soft tissue is exposed on the other side of the cartilage. This figure is meant to illustrate this point. Doing this may weaken the concha to such a degree that you have bunching in the conchal bowl which is undesirable. It is much better to gradually thin the concha carefully so that a large expanse of cartilage is thinned evenly and sufficiently to medialize the ear without much

pressure placed when assessing the ear intraoperatively. If you do encounter areas of bunching, tacking sutures can be done with 5-0 fast gut to allow these areas of soft tissue to adhere to the adjacent underlying postauricular areas. Another reason for recurrence is an overdependence on the conchal mastoid sutures and less on the conchal shaving. I believe conchal shaving is essential in getting more long results with medialization. If there is little antihelical bend, I might be conservative in the conchal setback superiorly in order to allow the Mustarde sutures to medialize the upper third and create the antihelix bend to the desired amount. But I always have in mind that the less dependence on the Mustarde sutures, the better it is for more long-term results. After each round of shaving, the frontal view is checked to make sure that the concha is not over weakened and to get just the right amount of setback. This is perhaps the key to the best results. The concha is set back with 4-0 clear nylon placed sequentially and incrementally in number. The antihelical bend is created with the Mustarde sutures. The Mustarde sutures are placed through stab incisions from the anterior side with an 11 blade. This makes it easier to judge the amount of bend that would be created. This approach puts both less strain on the Mustarde sutures and allows me to get more accurate and aesthetic results. It also allows less strain on the conchal mastoid sutures and the possibility of weakening the cartilage that is used for these sutures when you put the sutures from behind.

In Fig. 55.2, the yellow dots show where the Mustarde sutures will be placed. Sixteen millimeters is the distance across the width of the antihelix. The sutures are placed 10 mm apart in the vertical dimension, lengthwise along the antihelix, as shown. The next horizontal mattress suture is 2 mm apart. These measurements are more the classical approach. In reality, you can determine where you want the antihelical bend by bending the helix and mapping the light reflex that you see. The bend will usually also create a highlight, and the edge of the highlight is where you can make the sutures enter. The classical measurements are just a guideline, and they can be quite variable depending on the person. As you move more inferiorly, the width of the horizontal mattress sutures also gets closer than

16 mm. Instead of 16 mm, the author often finds that 14 and 13 mm are for the first Mustarde horizontal suture and 12 and 10–9 mm are for the second Mustarde sutures. At times, the author finds, however, that only the first suture and second one are needed for support.

Undercorrection: General Thoughts

Undercorrection of the otoplasty is a much easier situation in an otoplasty revision [5] case than the overcorrected ear from otoplasty. Undercorrection is revised most of the time by redoing the procedures [6, 7] that were done in the original surgery. Some general personal thoughts on undercorrection in the revision setting and the use of Mustarde sutures and conchal setback will be presented here. Most of the time, undercorrection can be corrected by further conchal setback and conchal weakening in the particular section of the ear where the undercorrection is located. You can reference the above pointers on how to achieve that. Removal of more mastoid fascia can also be done in the superior, middle, or lower third to further medialize the ear in each of these areas prior to the conchal setback. This is not necessary in most situations and that the conchal setback with shaving is more than effective. There are many instances when after the conchal setback and the Mustarde sutures are done, the superior and anterior attachment of the helix can assume an odd appearance in that portion of the ear. A bowed and protruding helix is sometimes the result near the anterior attachment of the helix. Tacking of the superior and anterior helix to the deep temporal fascia can be done with a 4-0 nylon to address this issue (Fig. 55.4). Locating where to place the nylon sutures is paramount. You have to test different areas in this location to achieve the desired results. The more anteriorly the suture is placed, the more tension is created, and you can actually get some lateralization to the helix. Whereas a more posterior and superior suture will more medialize the ear at the superior third. Also carrying out the Mustarde sutures again and tying these sutures more aggressively can further medialize the upper third if this is the cause. You can determine if you need Mustarde sutures



Fig. 55.4 Tacking the superior anterior attachment of the helix (*Green arrow*). This is a common area to create an odd bowing effect after Mustarde sutures and conchal setback. Tacking this down will get an even better result for your patient

when you have no significant antihelical fold and the concha appears to be set back enough already. Again, the details on the Mustarde sutures and the conchal setback were explained earlier and in other chapters.

Undercorrected Upper Third

Further setback of the upper third can be accomplished by more aggressive Mustarde sutures being careful not to hide the upper helical rim behind the antihelix on frontal view. Also, as mentioned earlier the anterior and superior attachment of the helix can be set back through a separate incision or an extension of the original incision (Fig. 55.4). The goal here is to tack the helix in this area to the temporal fascia. If you want to avoid suture failure this time and would like to support your revised Mustarde suture, one



Fig. 55.5 If you want to avoid suture failure this time and would like to support your revised Mustarde suture, one option is to stagger the Mustarde suture and have them overlap with each set of horizontal mattress sutures separated by 5 mm. The *yellow dots* represent the first Mustarde suture, and the *green dots* represent the second set

option is to stagger the Mustarde suture and have them overlap with each set of horizontal mattress sutures separated by 5 mm (Fig. 55.5).

If the undercorrection of the upper third is not due to the lack of the antihelical bend, treatment of the conchal bowl may be what will be needed. As discussed earlier, most conchal setbacks are concentrated on the projection of the middle third. The lack of exposure and treatment of the upper third strut within the conchal bowl during the original procedure could be the cause of the excessive lateral position that persists in the otoplasty revision. So one needs to prudently decide if it is the Mustarde sutures or the conchal setback or both that are needed. The key to this decision is whether there is present an adequate bend in the antihelix. If there is a deficiency, you will need to determine if Mustarde sutures will be enough to medialize the upper third to the ideal degree without hiding the helix behind the antihelix. If this is not enough, it may still require conchal bowl shaping. Further conchal setback, when required, necessitates aggressive exposure of the upper thirds conchal strut and further

incremental shaving and conchal mastoid sutures to create the ideal position of this section.

Undercorrected Middle Third

The undercorrected middle third will require more conchal shaving, setback, and possible removal of soft tissue beneath the conchal bowl. Thoughtful and incremental changes will achieve the best results based on preoperative patient counseling. Conchal shaving and setback should be more than enough to medialize any section of the ear, and the removal of soft tissue is not really necessary. It is important to make sure that it is truly an undercorrected middle third and not an overcorrected upper and lower third. In this situation, further medialization of the middle third will lead to an overcorrected ear as a whole. This would be the worst situation and the most difficult to reverse depending on the maneuvers that were used to achieve this state.

Undercorrected Lower Third

For the undercorrected lower third, further conchal setback requires aggressive exposure of the conchal bowl inferiorly. Further shaving of the inferior strut of the concha with mastoid conchal sutures will be the most effective move to medialize the lower third. In addition to more aggressive conchal setback, removing the cauda helicis can help medialize the lower third. Although this is often suggested in reality, the removal of the cauda helicis has less effect on lower third than concentrating on the inferior strut of the concha for more medialization. More aggressive skin removal is another adjunct to medialize the lower third but less accurate and reliable. There are many variations in drawing the skin resection to help medialize the lower third. The dumbbell excision of skin is often done in the original otoplasty to help medialize the upper and lower third. This can be done again during the revision in a more aggressive manner. Another consideration is to tack the earlobe in a more medial position by extending the incision inferiorly and

tacking the earlobe to the deep soft tissue in this area. Aesthetic judgment will determine where and how the incision is extended to achieve the results you want. The inferior incision starts at the inferior end of the original postauricular incision but is located just under the lobule. You have to determine where you want the earlobe to be more medialized, and this will guide you on how you place your incision. However, all of these other options are inferior to the thoughtful treatment of the inferior conchal strut with shaving and sutures. These adjunctive maneuvers can optimize the conchal setback revision of the lower third but are not necessary in my opinion.

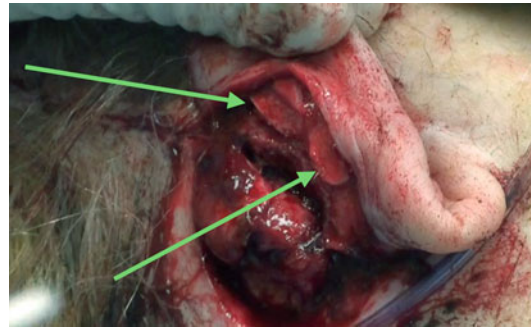


Fig. 55.6 Antihelix with grafts in place. Dissection is required with scissors to spread and cut through scar tissue holding the overly aggressive antihelical bend. Cartilage grafts are in place (as indicated by the green arrows) to maintain the correction for the long term

Overcorrection of the Upper Third

Reversing the Mustarde Sutures

Overcorrection after otoplasty is the much more complicated situation. In the upper third, it can entail over tightening of the Mustarde sutures. In this situation it may be that the helix is not visible on frontal view or contributing to the overmedialized state. The approach entails loosening the bend of the antihelix by cutting through sutures and scar tissue. Through the postauricular incision, the iris scissors is used to incrementally incise and spread through the scar tissue just under the antihelix. A cartilage bar that is straight or bent less than the current bend in the antihelix is an important consideration in supporting the reversal of the overly aggressive Mustarde sutures. Strong sutures to hold these grafts in place are necessary to resist recontracture of this area (Fig. 55.6). Through-and-through sutures to tack these support grafts are also a consideration to strengthen the position of these grafts with 4-0 fast gut. Reverse Mustarde sutures are also an option or can be done in conjunction with these other maneuvers with the goal of bending the antihelix in the opposite way. These sutures can be done in an analogous way that lateral crural horizontal mattress sutures are done to support the lateral crural from a convex to straight shape. One could choose to place these support sutures

for additional support even with cartilage grafting and the other methods mentioned.

Reversing the Conchal Setback in the Upper Third

Less commonly, an overcorrected upper third is due to an aggressive setback of the concha in this area. Because the conchal setback is mostly directed towards the middle third, I often find that this is not the reason that the upper third is overcorrected. As I will explain in more detail below in the overcorrection of the middle third, release of adhesions of the conchal bowl will precede the use of cartilage batten-type grafts to the concha. The goal is grafting cartilage to support the strut that usually holds the upper third in a more lateral position within the concha. To support this, more grafting in the middle third can be used to support the upper third cartilage strut grafts. This is done in much the same way as in Fig. 55.6. The difference is that these grafts are placed where the struts were originally and some overlap is helpful for support. Other options exist when cartilage is scarce. Rotating mastoid and postauricular tissue based anteriorly can be done to lateralize the upper third. If this tissue is not enough, you can rotate a superficial temporal fascial flap based on the superficial temporal artery. Medpor or rib cartilage can also be carved to lateralize the upper

third but are second choices and should be discussed with your patients in greater details.

Cartilage Grafts

The lack of cartilage may become an issue in this situation. Obvious possible sources include nasal septum, rib, or the other ear. You can also consider the ipsilateral or contralateral tragal cartilage, caudal helix cartilage, or conchal bowl that is not contributing to the ultimate shape of the ear. In regard to the tragal cartilage, preserving the portion of this cartilage that immediately protrudes laterally to the external auditory canal is prudent to maintain the shape of the tragus. For conchal bowl cartilage sources, taking the parts of the cartilage that are not part of the struts that are protruding the ear is important to maintain the amount of protrusion that you would like to maintain. This usually limits conchal cartilage that is at the base of the bowl.

Skin Component

One of the biggest issues with overcorrection in any section of the ear is the loss of skin. Without the outer lining, all other attempts to revise the overcorrected ear will not be effective. The extremely strong pressures from the contracture will ultimately destroy any scar release, cartilage grafting, and other measures that are done. There are many possibilities for correction. A V-Y advancement is a possible way to recruit skin to the postauricular area directed to the area of the ear that needs the most skin. This can be designed from behind the ear to recruit skin from the postauricular area (Fig. 55.7). The width of the V should approximate the area that is in need of lateralizing the most. If at all possible, it is desirable to have the Y limb close along the hairline. Another option is the use of two separate fusiform shapes that can be recruited from different sections of the ear (upper, middle, lower third) based on a subcutaneous pedicle to augment the skin where it is needed. Figure 55.7 shows these flaps that were used to augment the middle third



Fig. 55.7 Options for skin replacement. This is an example of skin flaps that can help augment the middle third. The fusiform shapes denote options for subcutaneous pedicled flaps that can be advanced into the middle third. Additional skin can also be recruited through a V-Y advancement with the superior limb oriented along the postauricular hairline as shown. Variations of this can be tailored for the upper and lower third of the ear

in this particular patient. A variation of this can be done for the upper and lower third as well. You must plan the flaps so that when they are advanced, the widest portion is at the most medialized location that you are trying to correct and the advancement and the width of the flaps will also support the parts of the ear that also need to be lateralized. A posterior hairline incision can be used to advance a rotational flap of skin to this area as well. The length of the hairline incision will depend on the amount of skin that will need to be recruited. A transposition flap from the preauricular area can be considered if the patient is agreeable to an incision in this area. Full-thickness skin grafts from the opposite ear or other areas are other possibilities if regional skin flaps are not enough. With full-thickness skin grafts, the revision otoplasty could be approached in a staged fashion. The full-thickness skin graft is done a few weeks to months in advance before cartilage grafting, and other maneuvers are done to revise the otoplasty. If done in one stage, rotating mastoid fascia or superficial temporal fascia based on the superficial temporal artery should be considered to support the skin graft. Others have suggested recruiting skin from one of the

other sections of the ear (upper, middle, or lower third) to supply skin from an area that is overcorrected to the area of deficiency [5] through transposition flaps.

Overcorrection of the Middle Third

With the middle third an overcorrection can lead to a telephone ear deformity where the middle third is brought in more relative to the upper and lower thirds of the ear. The main cause of this is too much of a conchal setback in the middle third area or not enough conchal setback in the upper and lower thirds. For the upper third, overly aggressive Mustarde sutures are also a consideration. Thinking about these points is an important determination before deciding to revise any otoplasty. An adequate discussion with your patient is paramount to find out what they would like. Computer imaging is helpful to find an agreement of a shape that you are both trying to achieve and that improvement and not perfection is the goal. If the overcorrection is due to an over aggressive conchal setback, augmentation is necessary.

Reversal of the Conchal Setback and Element of the Conchal Bowl

Knowledge of how each section of the ear is affected by the conchal bowl is important in understanding how to revise the overcorrected or undercorrected state. The superior third supporting strut is rather straight and perpendicular to the surface of the head compared to the middle strut. The middle third is more curved to the bowl's base, while the inferior third can be in between the two. Variations exist. Most of the time there will be remnant cartilage in the concha that when supported by stronger cartilage grafts will allow the concha to resume a shape more like the conchal's original shape. Release of scar tissue causing the concha to adhere to deeper tissues is a necessary first step. The new grafts that are supporting the struts should have adjacent grafts in the location of the other struts for support or collapse is a likely possibility. Depending on which

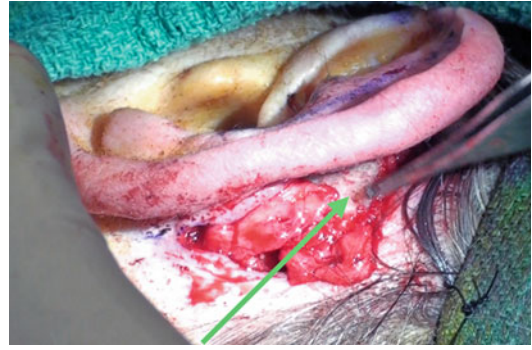


Fig. 55.8 Medpor in place to help lateralize the ear. The *green arrow* and Adson forceps are pointing to the Medpor in the postauricular space to help lateralize the ear. Mastoid fascia anteriorly based and flipped to cover the Medpor implant is shown just below. There is another rotated flap based on an inferior pedicle that is also being rotated upwards to the Medpor

section of the ear is overcorrected, the grafts will need to be done in the upper, middle, or lower third. The overcorrected ear and how it is related to the conchal setback procedure in the section of the middle ear is most often overcorrected by the conchal setback. Supporting soft tissue around the grafts that will fill in possible dead space and also support the cartilage grafts holding the ear laterally can be helpful to add additional support. If the struts are not able to recreate the strength of the original struts holding the ear in a more lateral position, a rib cartilage graft carved to fit may be necessary using Burt Brent's microtia approach. An alternative is the rotation of mastoid fascia to lateralize the ear in the right amount or rotating superficial temporal fascia with the same intent as mentioned previously. Medpor blocks are another option that can be carved to emulate the original conchal shape also through incorporating Burt Brent's microtia approach (Fig. 55.8). A vascular bed is necessary when contemplating Medpor or complications could arise. With any of these approaches, a prerequisite is sufficient outer lining. Many times, it is the lack of skin from overly aggressive skin resection that has caused the ear to become too medialized. Hence, replacing the skin component is likely the first objective to getting a sufficient result as discussed previously. If this is not accomplished, it is my experience that other procedural steps like cartilage grafting,

release of scar tissue, reversing sutures, and all other maneuvers will be done in vain.

Telephone Ear Deformity

Again, when considering the overcorrection of the middle third, you need to determine if the middle third is actually ideally set back and the upper and lower thirds are more protruding or if the middle third is really overcorrected. If the middle third is ideal and the upper and lower thirds are protruding more than ideal (telephone ear deformity), then you may need to set back the upper and lower third. This is done by getting wide exposure of the upper and lower thirds to further weaken the concha bowl and the struts that are holding these areas in a more protruding manner (Fig. 55.3). Most of the time, the conchal weakening was concentrated on the middle third in the original procedure because surgeons are less likely to get the wider exposure to approach these superior and inferior areas to set back the upper and lower thirds. So in the revision, you must adequately expose the struts that are holding the upper and lower thirds more laterally than the middle third. Following this, further weakening and mastoid conchal sutures will allow you to set back the upper and lower third into a more ideal position. If the middle third is the section that is overcorrected, augmentation and reversal of the conchal setback is required as explained above.

Overcorrection of the Lower Third

For the lower third, the discussion will repeat some of the same issues discussed above. In regard to the specifics of the lower third, it is more natural that the lower third is more medial than the middle and upper third. The upper third can tolerate the most lateral position. This subconsciously emulates the desired shape of the face, with the width of the face at the level of eyes being more attractive when it is wider than the lower third of the face. If you are in a position where the upper and lower thirds are medialized more than the middle third, it is a better option to concentrate

on lateralizing the upper third before the lower third for this reason. A medialized lower third is much more easily tolerated from an aesthetic standpoint than a medialized upper third.

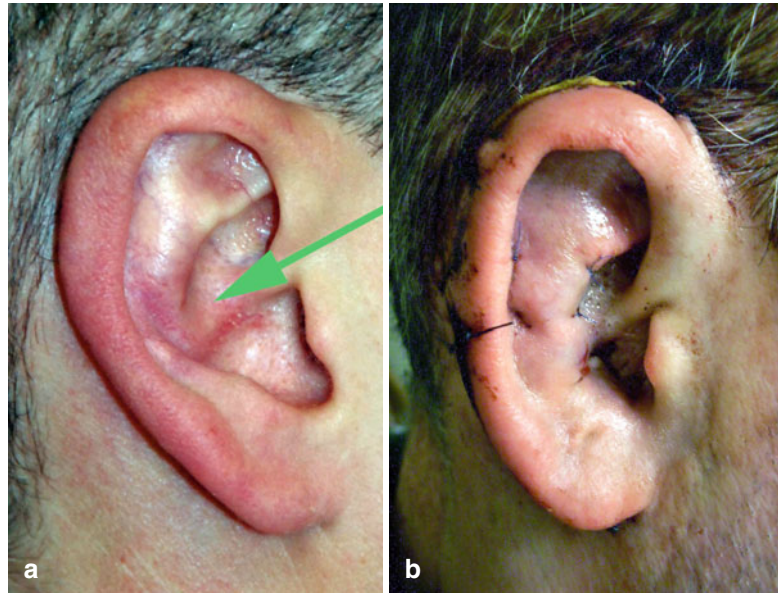
Reversing the Conchal Setback in the Lower Third

For an overcorrected lower third, cartilage grafting the inferior struts of the conchal bowl is one option. A single strut is likely to bend one way or the other. One should support the strut with another strut, most likely in the area of the middle third to support the strut holding the lower third in a more lateral position. If these struts are not strong enough to hold the ear laterally, a total graft with a strut carved out for the inferior and middle third may be needed. This can be done with a rib graft or Medpor block carved to emulate the conchal bowl in these areas. As mentioned before, rotating a mastoid fascial graft based anteriorly can be an option. The superficial temporal parietal fascia is complicated because this rotated flap will likely also lateralize the superior and middle third and you will have to determine if this is what you want to achieve. Also this flap has a longer distance to reach for the inferior third and is a second choice after the mastoid flap and other options.

Reversing Overcorrection of the Lower Third Created by Overly Aggressive Skin Resection

Support for the skin lining is essential as described in the other sections. Over-resection of skin in the lower third is more a common situation than in the upper and lower third because resection of skin has been taught to be one of the main ways to medialize the lower third. In addition to the V-Y advancement, full-thickness skin graft, and posterior hairline incision and rotation, a preauricular rotation flap could be considered (at the expense of an incision in the preauricular area) as a source of skin. A preauricular skin flap is perhaps best used to replace skin in the lower third as compared to the middle and upper

Fig. 55.9 Antihelix irregularity. **(a)** The area of depression was excised and the two halves connected. With a mastoid facial graft, minced cartilage was used to further shape this area (*Green arrow*). **(b)** Immediately postoperative after correction of antihelix irregularity. The irregularity was corrected by excising the depression reconnecting the antihelix and then shaped further with a mastoid fascia and minced cartilage underneath



third. Another option is a tissue expander prior to the otoplasty revision. This option, in my experience, is the most unpopular of all the options. In the situation where the upper or middle third has a surplus of skin, a rotation flap from this location can be swung inferiorly to allow the lower third to become more lateralized. But as stated earlier, cartilage grafting is essential in holding any section of the ear in a more lateral position, whether it is upper, middle, or lower third of the ear, for the long term.

Sharp Edges and Irregularities

The Mustarde sutures and conchal setback when done right should have the least risk of having these issues. Many other techniques require incisions through the antihelix and helix that can lead to sharp edges and irregularities that people often seek remedy. Also rasping, burring, and other forms of abrasion to weaken the front portion of the ear to allow bending can lead to irregularities. Prevention is also a key here as well, and the author uses Mustarde sutures, conchal setback, and the suture at the anterior superior helix attachment for most all otoplasty prominent ear situations. Figure 55.9 shows an antihelix irregularity that the patient said looked “broken.” This was

repaired by excising the depressed area and connecting the two edges. To further soften the ear, a mastoid fascial graft was incorporated over the repaired area and minced cartilage added to add structure and shape to the antihelix. This case illustrates how you can approach sharp edges and irregularities. Most sharp edges can be excised and shaped to blend in with the surrounding cartilage. The use of scissors, rasps, and power burs can aid in achieving this. If augmentation is necessary, cartilage grafts can be used to help shape different portions of the ear. Morselizing the edges of the grafts can help them blend in with the native cartilage. Minced cartilage can give you some ability to mold the shape that you want. Because the skin in this area is so thin, a fascial graft is a necessity to help your corrections and grafts blend in. The fascial graft can also allow you to contain minced cartilage in the location you want and help you mold them into the shape you want as well.

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