All-on-4?

This board presents cases on implants and riles up some stirring discussion.

MarcinOpole
Member Since: 09/12/11
Post: 1 of 85

An OPG of my 62-year-old patient. Expects a budget treatment with implants. Preferably two-stage treatment starting with maxilla. Luxation of all maxillary teeth except first premolar on the right side (14). What are your suggestions? Do you think the all-on-4 option would be suitable or shall I make a removable denture (overdenture on the locators)?

I crossed out the teeth to be extracted for sure. ■

JUL 29 2012

greg moritz
Member Since: 01/28/08
Post: 2 of 85

You won't see too many people who want to talk about the all-on-four on this forum. This patient is very likely an excellent candidate for the procedure because most patients are. Not sure why you would want to keep any of those teeth in either arch really.

If you want to treat the arches separately, make the temporary appliance on the bottom first. If he's happy, do the same on top and then make the final prostheses at the same time after implants have all integrated.

I've only done a couple true all-on-four cases, but the patients and I were very pleased with the results. I'm a believer.

The key to success on these is to remove enough bone at the time of extraction. If you do not there will be never-ending problems. ■

JUL 30 2012

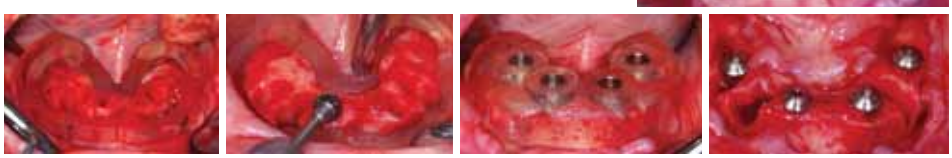
The Green Hulk
Member Since: 06/15/07
Post: 3 of 85

Patient has plenty of bone. If money is not an issue, keep the teeth that can be saved. Looks like 10 implants on top, eight implants for the lower. Immediate placement and immediate load. ■

JUL 30 2012

mark_jackson
Member Since: 09/30/03
Post: 4 of 85

I agree 100 percent. Surgical guides and bone reduction guides make these a breeze. This case was done by Dr. Smith in Merced, California, via our planning services at PrecisionSurgicalGuides.com. ■



JUL 30 2012

ChipPayet
Member Since: 07/08/03
Post: 17 of 85

I'm curious – How long has the all-on-4 concept been around? I mean, I really don't know, so I have no way of judging how predictably successful they are (especially as a beginning to implant placement and prosthetic restoration – not singles, but overdentures, hybrids, etc.).

My biggest concern goes back to the idea, "It doesn't matter how few or many implants you put in – the patient only cares if what you put on top works." You know, if you place five to six implants and one fails, your restoration will probably still be successful. But if you

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only place four and one fails, that restoration is history. "All-on-4 but none-on-3," as I've heard several people say. ■

JUL 31 2012

carlcrutchfield
Member Since: 05/30/08
Post: 18 of 85

I was talking to a really great doc from Houston in an IV sedation course who does a lot of these all-on-4 setups, and he said he went and trained in Portugal with the guy who "invented" the system. I Googled it and it came back to Dr. Paulo Malo at the Malo Clinic. I'm pretty sure his technique has been around for about 10-15 years now. ■

JUL 31 2012

Mo Taheri
Member Since: 04/25/04
Post: 20 of 85

Hey Chip, there was a study recently (I have to look it up on my laptop to give you the citation) that concluded that the complication rate for these acrylic-based fixed-complete dentures was very high after five to 10 years.

Don't make huge promises with these prosthetics. They wear out.

As far as I know, the implant survival is acceptable. Also, the study I'm quoting doesn't specify the number of implants, just that particular class of prosthetics as a whole have a huge complication rate. ■

JUL 31 2012

mark_jackson
Member Since: 09/30/03
Post: 21 of 85

Only the *provisional* dentures have a high complication rate, and the patients are prepared for this, and even then, if they are done correctly, they *do not* fail. If you are concerned, do the provisional using a poured tooth intaglio, not denture teeth. Use an injection system, and not cold cure acrylic.

The titanium-framed prosthetics, with proper occlusion, work very, very well, with very few complications. Our office does more than just about anyone in the country and it is a great service with six or more implants. ■

JUL 31 2012

greg moritz
Member Since: 01/28/08
Post: 23 of 85

Implants are not teeth and you have a special set of problems if you want to place them adjacent to one another. It's not that it can't be done. It is just more difficult and prone to compromise.

I would assume that the prostheses wear out similar to a well-made set of dentures. How could they not? Probably faster since more force is possible with such good support. I like the idea of pouring the teeth in the temporary appliances rather than using denture teeth and creating fracture points. I think I will start doing that. PFM bridges fracture and are much less aesthetic in a lot of cases than the hybrids.

All-on-4=none-on-3. True, but the implants practically never fail and if they do it is usually in the provisional phase where it can be dealt with. These cases typically involve abundant bone and a great implant design, so implant survival is freakishly high. ■

JUL 31 2012

mark_jackson
Member Since: 09/30/03
Post: 24 of 85

It doesn't cost that much more, or take that much longer to throw in six, which is what we do. But you are right. I don't think in the last year we have had more than one or two we couldn't use, and it was well before the definitive prosthesis. ■

JUL 31 2012

Dan M.
Member Since: 04/03/08
Post: 25 of 85

Sometimes it's not a matter of cost but a matter of available bone. For example: Some patients are not willing to go through grafting procedures and that can limit the amount of implants that can be placed.

Last year at the AAID meeting, Dr. Carl Misch spoke and rationalized his reasoning behind placing eight to 10 implants per arch. He was then followed by Dr. Jack Hahn who

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is a proponent of the "all-on-4" – it was a very interesting dichotomy. Both are highly skilled practitioners with decades of experience and have shown success with their various treatment approaches. There are many factors that play into the success of an implant prosthesis and proper treatment planning is paramount in the success of *any* route that we take. ■

JUL 31 2012

Doctor Suppuration
Member Since: 12/11/02
Post: 28 of 85

Is there a benefit to all these fixed-type restorations compared to two locator implants on the lower with an overdenture? Do patients have greater joy with these other restorations? ■

JUL 31 2012

Chris Winterholler DDS DICOI
Member Since: 10/09/01
Post: 55 of 85

I have been doing all-on-4 cases, whether it's doing the surgery or restoring one, almost every day for six years and have found them to be very well received by the dental public. We have trouble only when the patient has medical complications like diabetes or smokes but even then the complications are rare if you know how to adequately reduce the bone, which ensures enough prosthetic space for the hybrid, and the occlusion is refined and perfected.

The magic I have noticed after more than 300 arches is that the cross-arch stabilization of the immediate-loaded implants in either arch by the "picked up" denture is really necessary. If it's not loaded, the failure rate is higher when compared to placing them and doing a two-stage procedure.

Every implant manufacturer, started by Nobel, is coming out with angled multi-unit abutments for their own version of an all-on-4 and I have used about every one of them. And this is what makes this type of case a reasonable and economical alternative for the patient.

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Check out more all-on-4 cases by searching for these message board threads on Dentaltown.com.

All-On-4 Using Nobel Active Implants
Search: All on 4

How Much Can You Cant Implant to the Lingual?
Search: Cant Implant

I am not a big fan of locators on 4. Way too much fiddling with stuff for me, my staff and the patient. The fixed hybrid solution is much better, or the ultimate is probably the bar-retained overdenture if adequate space is present. But the patient still gets a fixed immediate load all-on-4 until complete healing before the bar and overdenture are made. Because the success of the case is much better in my hands when we do it this way.

Implants specifically made for immediate loading are also the key for success. We all know that implants integrate, but to me thread design and insertion torque are key to immediate loading success – Nobel only for me for this reason. Others are good but Nobel Active particularly is the bomb implant for these cases.

The meta-analysis I don't understand, I have always been more of a mechanic than an engineer so the studies don't mean much to me. I don't know how many surgeons were involved in that study – Who restored it? How much space did they have for the hybrid? What kind of occlusion did they develop? What kind of implant did they used? But in my hands and from my experience, all-on-4 is just what Palo Malo and Nobel have now said for years: It works.

I hope Mark Jackson chimes in on this as he has apparently seen hundreds of them. I don't know how a hybrid is much different than an overdenture that needs to be replaced every five to 10 years or so, but the hybrid with the titanium bar can be re-flasked with identical teeth for less than $800 lab fee every five years if necessary.

The patient is told at the final delivery to keep the master models and the siltech putty matrixes of the completed hybrids in their sock drawer just in case they ever need a repair or a set of new "Corian Countertops." The bars don't deteriorate and the implants I place for any all-on-4 are usually 4.3 x 15s. We have a lot of titanium next to osteoblasts and we usually only give the patient first molar forward occlusion.

All-on-four works. ■ **Chris Winterholler, DDS**

APR 1 2013

doctored
Member Since: 09/21/02
Post: 56 of 85

Thanks for the input, Chris. I see you are an advocate of the Nobel system. Have you explored other systems with conical indexed connections and platform switching? Seems to me that these kinds of implant systems will eventually replace all that do not have these features for many reasons. The volume of your clinical cases is very large. Would you please elaborate on the restorative aspect about how you restore these all-on-4 cases? Are they acrylic based or do you fabricate a framework? Wish I was closer and could see you treat a few patients. Thanks for posting. ■ **Ed**

APR 1 2013

Chris Winterholler DDS DICOI
Member Since: 10/09/01
Post: 57 of 85

Ed, I have used many systems with success but I am biased to the Nobel just for personal preference. I also have my own Procera Scanner for fabricating the bars or custom abutments for every case. I usually make my own crown and bridge over with my CEREC Inlab or chairside. And the Nobel scanner really works great when it's a Nobel implant I have placed.

I made the conscious decision about six years ago to go with one implant system between my two offices and wanted a system that was ultimately versatile for a wide variety of cases and also simple for staff to understand. I like the one screwdriver approach that Nobel has between all its implant lines and this alone greatly simplifies the daily implant circus for my assistants and internal lab technicians. If your not careful, you end up being the "Keeper of the Secret Screwdrivers" when your implant practice takes off.

Yes, they are pricey but my time is more valuable than managing multiple implant lines. I have a closet full of kits but the Nobel one is the only one we get out anymore.

Most labs that have a removable department are gearing up for all-on-4 cases. I have two very good ones here in Arizona and I know Mark Jackson from another forum we are on and know he knows his stuff with regard to hybrids.

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Ask me questions specifically about hybrids on all-on-4 and I will do my best to answer here. ■ Chris

APR 1 2013

doctored
Member Since: 09/21/02
Post: 58 of 85

Chris, I am most interested in your impression technique. I assume you make an implant-level impression and then make resin connections to the transfers with small gaps that will be luted in the mouth before the second impression is made with a closed-tray technique. Do you have a lab mill the framework after the second impression is made and it is scanned? ■ Ed

APR 2 2013

Chris Winterholler DDS DICOI
Member Since: 10/09/01
Post: 59 of 85

Ed, I use the Borderlock Trays from Doctors Choice, Impergum Purple, and the closed tray impression copings over the multi-unit abutments. As soon as we pull it, I put the implant replicas on the closed tray impression transfers back into the Impergum.

We then use Gingifast from Zhermack to make the soft-tissue moulage around the implant replicas. My assistant then uses the Whip Mix Vac U-Spat to pour up the model in Green Die Stone. Forty-five minutes later we pull the model and use the temporary hybrid as the verification jig as we know it fits already. Usually I have the wax rims cooking in the triad oven and we take our wax records before the temp dentures go back in. I also stock a lot of teeth and I might set the anterior six so that the patient can see where I am going and it's a good time to start verifying the phonetics.

Second appointment is a wax try-in and if that goes well we put the whole thing in my Procera Scanner and design the bars. Five days later I send the whole box with the bars and the full wax try-in for final processing and finishing.

Third appointment is the delivery. I do it this way because a lot of my patients are traveling from far away and we want to minimize the number of appointments.

I haven't had one of them fail since I started doing it this way about three years ago and we are doing three or four of them a week sometimes.

Hope this helps, every step of this entire all-on-four process that is as predictable as doing an amalgam MOD is being compiled as we speak and you will most likely see it here in the near future.

All the best. ■ Chris

APR 2 2013

drwilldds
Member Since: 02/12/08
Post: 60 of 85

Ed, I have been doing my final impression just like you have described. Chris is the master of efficiency with these; however, I have still taken final impressions with pattern resin connections between impression copings. The attached picture is one I did this week on a patient who was tired of his locator denture on four implants. We are converting his case to a hybrid with first molar occlusion. His implants were placed a long time ago and not with the typical all-on-4 tilted distal implants. I will post follow-up photos of the final result if you would like. I have done a lot of these if you want to see any part of the process. My patients have all been extremely happy with the end result. My lab guy, Randy McHenry of Premier Dental Lab here in Billings, Montana, is awesome with these cases. ■ Will

APR 2 2013

Chris Winterholler DDS DICOI
Member Since: 10/09/01
Post: 64 of 85

Uwe, I am with you 100 percent and don't want to dilute what you are saying here. You are completely right. But I do my own surgery and always set the intended final position to be just like the Nobel Demo model. They survey in the same horizon because I do the alveoplasty to get to that point in space. Then the six-position MUA with either a straight, a 17-, or a 30-degree MUA gets me so that the MUA all shoot to the same vertical.

I also scan my own bars in the Procera Scanner and do the design myself. When it comes back from Nobel I am the one that takes it out of the box and verifies the fit.

I can whole-heartedly endorse, and do the method you describe when I inherit the case and the implants are placed like the case you show. But my cases all line up like the "Dead Nuts" Nobel patient model, so the prosthetics are then just shooting fish in a barrel.

Not perfect every time but close enough that with the 300 or so arches of all-on-4 I have done so far, I have not had one bar not fit using this method.

All-on-4 is restoratively driven to the max! If you struggle with a case whether you're a lab guy, a restoring dentist, or a surgeon, I am telling you, someone is operating outside the perfect box and the methods you describe come into play. And you better know what you are saying or you have no business trying to do any step of the process.

I appreciate you calling me out on this. But the conversation is what matters and will help us all. Please, shoot me full of holes so that people can get the idea through our conversation and see what a wonderful service all-on-4 can be when the whole team, even if that's one dentist that is doing the entire case, can see how efficient and predictable this great service can be.

I am so short on time managing my own endeavor with regard to all-on-4 and working two busy offices that posting content here is difficult to add to the plate right now. So visually I can't respond as well as you have here.

All the best and beautiful work you show here. ■ Chris

APR 3 2013

bbauer
Member Since: 05/28/04
Post: 65 of 85

Jerome Smith on here said he took four of his favorite patients and converted them for cheap from OD to fixed and then interviewed them. He said he wished he would have recorded those interviews. They were all much happier. ■

APR 3 2013

Chris Winterholler DDS DICOI
Member Since: 10/09/01
Post: 66 of 85

I agree and can say the same. Fixed over removable – if you have four strategically placed implants – are superior. Locators drive me crazy. Hader bar clips are even worse. And none of those options are immediate load so your failure rate goes up. Yes, I said up. The cross arch stabilized immediate loaded all-on-4 is more successful than four placed and left in healing caps then "located" after integration.

I haven't found an attachment I like to work with when all-on-4 is a viable option. And patients respond the same way 80 percent of the time. I have a few who have returned and want something they can more easily clean like a removable, but they are rare. ■ Chris

APR 3 2013

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