

[INTERVIEW WITH DR. KEATS]

FILE: C-SECTION DR KEATS 1_01

[00:00]

FRANK ROCHE

According to the American College of Obstetricians and Gynecologists and The Society for Maternal-Fetal Medicine, cesarean birth is too common in the United States, and has increased greatly since it was first tracked in the 1960s. Using c-section data reported by 1,122 hospitals through the voluntary 2015 Leapfrog Hospital Survey, data showed that over 60% of reporting hospitals had excessive rates of c-sections. That means that far too many women are undergoing a major abdominal surgery without medical necessity.

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FRANK ROCHE

In 2015, Cigna shared the Leapfrog Maternity Safety Committee, a group consisting of members from United Healthcare, HealthNet, Aetna, Cigna, Leapfrog Group, and ACA Healthcare, committed to improving maternal safety and a focus on increasing c-section awareness. That's what we're going to talk about on this podcast, I'm your host Frank Roche, joining us today is Dr. John Keats, medical market executive for Cigna Health Plans of Arizona.

[01:05]

FRANK ROCHE

Dr. Keats is a fellow of the American College of Obstetricians and Gynecologists, ACOG, a practicing physician, Dr. Keats has served as chair for the departments of Obstetricians and Gynecologists at two hospitals, is a fellow of the American College of Physician Executives, a course director for the American College of Obstetricians and Gynecologists, post-graduate course quality and safety for leaders in women's healthcare, and serves on ACOG's office-patient safety program.

[01:32]

FRANK ROCHE

In addition to Dr.Keats, we are joined by Ana Corderio, a business communication professional with Cigna, and a new mother of a nine month old daughter, Lindsey Gidjunis, global social media marketing manager is also on the line. We'll get started by asking Dr. Keats about c-sections.

[01:49]

DR. KEATS

Well Frank, good morning, and thank you for asking me to join you on this, on this presentation on cesarean sections. Cesarean section is a major abdominal surgery, it involves making an incision in the abdomen of a pregnant woman to access the interior walls of the top front wall of the uterus, making an incision in the wall of the uterus to deliver a baby through that incision, and by-passing the birth canal completely.

[02:23]

FRANK ROCHE

And we noticed from the study that the rate of c-sections has gone up fairly significantly over the course of years tracking from the 1960s to now. Could you comment on that and perhaps some of the background on why?

[02:40]

DR. KEATS

Sure, absolutely. And you know, if you look over the course of basically those five decades, the rate of cesarean section has increased tremendously. The thing that was disturbing to ACOG, or the American College of Obstetricians and Gynecologists we'll refer to it more briefly as ACOG, going forward in this broadcast, but what disturbed ACOG was the fact when you look at those numbers, despite the ever increasing rate of cesarean sections in this country, there was no corresponding decrease in the rate of poor pregnancy outcomes such as cerebral palsy, or other injuries.

[03:21]

DR. KEATS

So ACOG came to the conclusion, that really a lot of these cesarean sections were being done for unclear indications, and there probably many many contributing factors to it. Part of it is the corresponding

increase induction of labor, many more women now than in the past are receiving medication to bring labor on as they get close to the end of their pregnancy, and there are many many reasons for that, some bonified medical indications, but some not.

[03:55]

DR. KEATS

In addition, the use of electronic fetal monitoring has given rise to a lot of these sensitive medicine being practiced in obstetrics. Obstetricians are one of the most frequently sued specialties in this country, and it is really fear of lawsuits that has driven the increase in cesarean delivery as well. So you have pressures from a lot of different directions coming together to lead us to where we are now with a very high cesarean section rate in this country, and in fact cesarean section is the most commonly performed major surgical procedure in the United States.

[04:35]

FRANK ROCHE

It looks like the numbers in a, and I don't have those exactly correct, but basically a third of births in the United States these days are cesareans, is that fair or are those proximate, and up from something on the order of 5 or 6 percent in the 1960s as it was tracked.

[04:55]

DR. KEATS

Yes, that certainly seems to be the trajectory, and your numbers are pretty accurate and tracked by the Center for Disease Control, keeps track of the statistics of cesarean deliveries in this country, and right now the cesarean section rate is somewhere around 32-34% according to the CDC, so that is a startling number to a lot of people, and it does represent a dramatic increase from where we were previously.

[05:26]

FRANK ROCHE

Knowing those numbers, why is it important to raise awareness around c-sections, and the potential health risks?

[05:33]

DR. KEATS

Well cesarean section like any major abdominal surgery, is not risk free. There's a chance of bleeding excessively, and they require a blood transfusion, there's a risk to damage of other internal organs in the course of surgery such as the vauve or bladder, or structures called the ureters, which are tubes that carry urine from the kidneys down to the bladder, and of course those things are at risk for a cesarean section where they would not be with the normal with spontaneous vaginal delivery.

[06:03]

DR. KEATS

It is major surgery, it should not be discounted with what the risks are, another one is infection afterwards in the uterus or in the incisions. It's not to be undertaken lightly, and a lot of it frankly, in this country, probably is driven by patient request, or patient desire to have the pregnancy over as soon as possible, that's leading to inductions and excessive inductions when the cervix is not ready, leads to increase cesarean rate.

[06:34]

DR. KEATS

Some women are electing to have a cesarean, simply not wanting to go through labor at all. I think by educating patients to ask the right questions to their physicians, if they are interested in having a vaginal birth, and certainly it is my belief as a OBGYN phsyican, that should be every pregnant women's goal is to have a safe, vaginal birth with a healthy mom and a healthy newborn at the end of it.

[06:59]

DR. KEATS

They need to be active participants in the decision making, and active questioners of their health care providers, whether it is a phsyican, and midwife, an OBGYN phsyican, a family phsyican who does obstectrics. They need to approach it in an engaged and active fashion.

[07:16]

FRANK ROCHE

And I guess they need to start asking those questions long before they are on the table and in labor. Those times for questioning are a little less, so this an active dialogue with your health care professional long before it is those fourthieth week.

[07:32]

DR. KEATS

Absolutely correct, Frank. That's right.

[07:34]

LINDSEY GIDJUNIS

So I was wondering if you could help shed some light on the difference between a medical emergency c-section versus a planned c-section.

[07:44]

DR. KEATS

That's a great question. Certainly, I don't want to leave anybody with the impression that all cesarean deliveries are unnecessary, there are many, many good reasons why a woman needs to have a cesarean. Some actually planned, and some emergent. The planned ones, I know that is not specifically what you asked, but for example if a woman has a placenta covering the opening of the cervix which sometimes happens, the medical term for that is placenta previa, that patient needs to have a planned cesarean delivery.

[08:20]

DR. KEATS

If a baby is breached and a large baby, those babies are more safely delivered by cesarean. We could spend a lot of the hour talking about the medical indications for cesarean, but on the emergent side as you asked, there are times where the umbilical core gets compressed, shutting off oxygen to the baby, we can see evidence to that on the external fetal monitor, or the electronic fetal monitor, and in those situations it is emergent to get the baby delivered by cesarean within a few minutes, and in those situations it can be life saving for the baby, or certainly avoid possibilities of brain damage or other significant problems to that baby after birth.

[09:04]

DR. KEATS

So cord compression which is called cord prolapse, which is rare but where the umbilical cord comes down through the cervix ahead of the presenting fetal part, in front of the head where it can be compressed and shut off oxygen to the baby. There's something called abruption where the placenta separates from the all of the uterus, the placenta is supposed to separate from the walls of uterus after the baby is out, and that's the after birth that is delivered after the baby is born.

[09:31]

DR. KEATS

But with abruption, the placenta separates prematurely when the baby is still inside the uterus, and this shuts off the flow of oxygen to the baby. So many, many reasons why an emergency cesarean section might have to be done. And that's not what we are really talking about here, you are not going to be able to avoid emergency cesarean sections. But it's the cesarean sections for the prolonged labor, or so called failed induction of labor that we really want to try to avoid.

[10:00]

FRANK ROCHE

One of the things that you brought up Dr. Keats was about induction. And the rise of that which is, and that may be a little off script or off topic, but what's brought that on? You know babies come-

[10:14]

DR. KEATS

Actually it's not off topic at all because I think one of the factors, and it's only one of many factors, but one of the factors leading to the increased c-section rate because these things have gone in parallel, you can draw a graph of the increase in the rates of induction and they parallel the rates of cesarean birth, because when you try to induce labor in a uterus and cervix that's not ready to be in labor, and results in a situation that you end up doing a c-section that might have been necessary if you simply had waited awhile.

[10:47]

FRANK ROCHE

Why? Why are people getting induced? Is it just a timing issue, or there are forty weeks, they counted off forty weeks and they are ready? That's interesting.

[10:59]

DR. KEATS

Well again, I don't want to leave the impression that all inductions of labor are bad. There are many many medical reasons why labor should be induced early because of medical conditions in the mother or baby. Chronic high blood pressure and diabetes are two of the most common, but there are many others. However, there has been a rise in patient driven inductions. Many women when they get towards those last two or three weeks of pregnancy, feel and express to their physicians they can't take it anymore, and they want to have their labor induced, and many doctors are reacting to that.

[11:40]

DR. KEATS

The problem that we really addressed first is many of those women were being induced before the 39th week of pregnancy, and many of those babies wound up being pre-mature and needing care and neonatal in the intensive care unit, or having other problems that would have been avoided if people had simply waited. So I think we have gotten the message out pretty well to most physicians, and really to a lot of patients as well that if you are going to get your labor induced in the absence of a true medical indication then you are going to need to wait to at least that 39th week of pregnancy.

[12:17]

DR. KEATS

Unfortunately also, many inductions have been for a physician's convenience, they may simply want to deliver a certain patient, they may want to get somebody delivered before they go on vacation, or they know they are going to be out of town. Sometimes they want to deliver someone on a day they are on-call so that they can be the one to garner the revenue for that delivery. There are a lot of non-medical motivations out there on part of both the patients and physicians that have led to this rise which we called non-medically indicated inductions of labor.

[12:54]

DR. KEATS

And although we have done a pretty good job of eliminating those occurring before the 39th week of pregnancy, even in the thirty ninth – fortieth week of pregnancy if the cervix is not ready, if the uterus is not ready to go into labor, then you give medication, which is what you have to do to try to open the cervix up, or to get the uterus to start contradicting. Sometimes it doesn't want to, it's not ready, it won't work, and those women wind up having a cesarean section, again, potentially could have been avoided if you had simply waited for spontaneous labor to occur.

[13:31]

FRANK ROCHE

Sounds like a lot of those kinds of pieces of dialogue with their doctor are absolutely essential. I mean that's a, it's interesting with the study that we cited earlier, the Leapfrog studies found that 60% of reporting hospitals had excessive rates of c-sections. I guess that means in excess of the average amount.

[13:54]

DR. KEATS

That's an interesting question as well. Really that interesting question that you bring up is that if you're going to quote this statistic, 60% had an excessive rate, what's considered an excessive rate? What Leapfrog looked at is a recommendation published by Health and Human Services, the government department. It was called Healthy People 2020, it had a lot of recommendations for population health for this country to be achieved by 2020.

[14:19]

DR. KEATS

And one of them was a cesarean section rate, and this gets a little technical, so I apologize for our listeners as it is a little hard to follow. But it is looking at the rate of cesarean section for a specific group of patients, although it is a large group, which is women having their first baby, women who are at term, meaning they are at the 37th week of pregnancy and beyond, women who have a single baby, no twins or triplets or anything like that, and whose baby is head down, not breached which is butt down, or sideways, so the medical abbreviation of that is NTSV, N means no prior babies, T for term, S is for singleton, meaning one baby, and V for vertex meaning head down.

[15:08]

DR. KEATS

So Healthy People 2020 recommended that hospitals have a NTSV cesarean rate of 23.9% and that's the benchmark that Leapfrog is using. They are looking at these hospitals and are saying, what's your NTSV cesarean section rate today, and how does that compare to the Healthy People 2020 benchmark of 23.9%?

[15:31]

DR. KEATS

And as you just quoted, 60% of reporting hospitals, not every hospital chose to report to Leapfrog, not sure to what is going on there, but of reporting hospitals 60% had a cesarean rate higher than 23.9%, so a quarter or more of women having their first baby, at term, single baby, head down, a quarter or more of those women were having cesarean birth, and Leapfrog and Health and Human Services would consider that excessive.

[16:02]

FRANK ROCHE

I learn something new every day, NTSV, I'll say that today, just because I think that sounds cool.

[16:07]

ANA CORDERIO

This is Ana, I just, Dr. Keats if we could go back to, you were going in depth about the inductions, and I just had a question...

[16:16]

DR. KEATS

Please.

[16:17]

ANA CORDERIO

So I know that if you're having a healthy pregnancy you get to week, usually doctors induce patients by week forty-two, because you've reached term, your top term, I guess is there any, you know any risk with letting the body just take its course and passing, not being induced, and passing week forty or forty-two, what's kind of the medical reasons for that? What's the research behind that?

[[16:46](#)]

[DR. KEATS](#)

Oh that's a great question. So let's make sure everyone understands terms, and terminology has changed, and we're trying to get this out into the population so people understand what OBGYN doctors, and others are talking about, midwives and other obstetrical practitioners are talking about when they refer to this. So term, the old gestation is considered to be forty weeks, and that's forty weeks counting from the first day of the last menstrual period.

[[17:17](#)]

[DR. KEATS](#)

Even though, we all know from human biology, the conception actually occurs about two weeks after that first day of the last menstrual period, the convention is then to count weeks of pregnancy from the first day of the last menstrual period with forty completed weeks being considered term. Now, that's now been passed out into different sections of that calculation, so when I was in medical school and in the residency we used to talk about term being in between thirty-seven and forty weeks of pregnancy.

[[17:56](#)]

[DR. KEATS](#)

And it was considered that once a baby got to thirty-seven weeks, the chances of them having a significant problem at birth is zero. Well it turns out not to be zero, it is small, but it is not zero. And if you part these weeks apart, thirty-seventh and thirty-eighth weeks, so thirty-seven weeks and zero days to thirty-eight weeks and six days, is now called early term. So it's termed but that's early term, and we're trying to get people to understand that that's the time if you go into spontaneous labor, that's fine, you're still termed, but it is early termed, and in early term is when you should not be trying to induce someone's labor in mishaps of a medical indication.

[[18:38](#)]

[DR. KEATS](#)

Full term is now considered from thirty-nine weeks and zero days to forty weeks and six days, so it's actually a two-week window, the thirty-ninth week and fortieth week of pregnancy is called full term, and when you look at the statistics that's the window in which they are least likely to have any complications

after birth. So that's really the ideal time to deliver, although as I said we would not interfere with the natural birth process prior to thirty-ninth week if the baby is at term.

[19:12]

DR. KEATS

After you get to the forty-first week, forty-one weeks and beyond, then bad things could potentially happen because the placenta is not an organ that is designed or programmed to live forever. The placenta literally starts to age, and its functions start to decline, and that decline can be noticeable after forty-one weeks. So, term used to be called, like I said when I was in training, was thirty seven to forty two weeks was term, and we didn't induce people until they got passed forty-two weeks, that has changed a bit.

[19:45]

DR. KEATS

The thinking is now once a woman gets to forty-one weeks and beyond it's appropriate to start having a discussion about inducing labor, and induction of labor at forty-one weeks or beyond that's actually considered a bonified medical indication for induction, once a woman gets to forty-one weeks.

[20:04]

DR. KEATS

And many women I know will choose to try to go a little bit longer, but most certainly, almost every expert in the field will agree by the time when a woman gets to forty-two weeks, the placenta will definitely begin showing signs of aging, and labor should be induced at that point. So, a good medical indication for induction is an induction that occurs between forty-one or forty-two weeks before the placenta function starts to decline further.

[20:30]

LINDSEY GIDJUNIS

Dr. Keats, I have a question for you, should women talk with their doctor in advanced about their delivery options, and the risk of having a c-section?

[20:37]

DR. KEATS

Absolutely, I think that is a great idea, and that's a conversation that can't start soon enough. We touched on it earlier with one of Frank's questions, but the time to talk about the doctors philosophy on cesarean sections, or what your desires are in terms of your birth process is not when you are in labor.

[20:56]

DR. KEATS

That's way too late, and these are discussions that should be had, probably I would say, reasonably sometime during the last third of pregnancy, we frequently divide pregnancy into three trimesters, first second and third, and the third trimester starts somewhere around the twenty-sixth or twenty-eighth week of pregnancy, and once you get to that point, you know you're going to have a baby at the end of the process, and that's the time in my opinion that it is time to start talking to the physician about what your plans and desires are for the birth experience, and what the doctors philosophy is regarding cesarean births.

[21:33]

DR. KEATS

The one caveat I guess I would get to that, wait for that, and this is what Leapfrog is trying to do, is trying to be really transparent in terms of what are the cesarean section rates at various hospitals, a lot of health plans are starting to, and hospitals themselves are publishing cesarean section rates, of individual physicians, so in some ways you could make an argument, that that process even really needs to start before your first OB visit.

[21:59]

DR. KEATS

Because you do want to choose wisely in terms of which OB physician you choose, and what hospital he or she utilizes, whether you want to choose an OB physician that has midwives affiliated with their practice or not as an option, for a lot of people. I know in some states there are even free standing midwife practices who will have a different philosophy regarding the birth process, so it pays to do your homework, and to figure out who has, if that's important to you and I think it should be, who has a low

cesarean rate, which doctors deliver at a hospital that has a low cesarean rate, and how can I choose wisely in terms of who is going to provide my obstetrical care.

[22:43]

FRANK ROCHE

Are cesareans more expensive to the system, and actually to the patient as well, as opposed to vaginal birth?

[22:53]

DR. KEATS

Well, it's hard for me to speak to the cost to the patient, because that's of course going to depend on their insurance or who is covering the pregnancy. In fact 50% of pregnancies in this country are actually paid for by the federal government through the medicaid program, so it's hard to say what it would cost in dollars per say to a patient, certainly in terms of what it would cost to the system, and to the payers, whether it is medicaid or private insurance, cesarean birth is a major operation, it is much more expensive, on the order of, actually several thousand dollars are much more expensive to have a cesarean birth than a vaginal birth.

[23:35]

DR. KEATS

So it definitely costs the system more, the cost to the mother really maybe is not so much in dollars, but more in the recovery, okay. So, the recovery from a major abdominal surgery like a cesarean is going to be a lot longer for the mother, than after a vaginal birth. And then there's also the implications of what happens with the next pregnancy. Because there are many places in this country, and many hospitals where trying to have a vaginal birth once you had a cesarean birth, is not even an option.

[24:07]

DR. KEATS

Many women end up having what you called a repeat cesarean sections, one or more, depending on how many children they want to have. So a lot of implications of having a cesarean birth, not only cost, but also recovering time, and management of the next pregnancy. Doctors really are savvy, and of course

hospitals are being measured on this, by the Joint Commission, which is one of the organizations that provides voluntary accreditation for hospitals.

[24:35]

DR. KEATS

But hospitals are being measured on this now, so the doctors know that they really should not deliver patients before thirty-nine weeks, and sometimes it's a difficult conversation. You know twenty years ago, a woman would come in at thirty-eight weeks, it's the middle of a hot summer, she said my feet are swollen, my back is killing me, I can't take it anymore, please induce me.

[24:54]

DR. KEATS

And the doctor pretty much would, and now the doctor has to say look you're not thirty-nine weeks yet, we can do it when you are thirty nine weeks and a day, but until then the hospital, and people put it on the hospital, which I think is fine, I say the hospital won't allow me to induce your labor before thirty-nine weeks, unless you have a true medical indication. And just being uncomfortable, as sympathetic as we all want to be with a very pregnant patient, we are really doing them, and their babies, specifically with this service by inducing them if they don't have a medical indication before thirty-nine weeks.

[25:30]

LINDSEY GIDJUNIS

So is that based off of hospital now, rather than the actual doctor's preference? Or is that the hospital standard now, is that something you see more often, or is it more personal?

[25:42]

DR. KEATS

Well I think in a way it is sort of both, but the ones who are enforcing it really are the hospitals, okay. The hospital OBGYN departments are putting in these so called hard stops, they put in systems to assess when an induction is going to be scheduled, how many weeks is the patient, if they are less than thirty-nine weeks then they insist that the doctor provide documentation of what is the medical indication for that induction of labor, and the expectation is that it will be something legitimate.

[26:12]

FRANK ROCHE

Are there any psychological effects of having a c-section?

[26:17]

DR. KEATS

Certainly it appears that there are in some women, some women are very disappointed in themselves if they are unable to have a vaginal birth, and they suffer anxiety, and sometimes even a form of post traumatic stress disorder after cesarean birth if they choose to see this as a personal failing.

[26:40]

DR. KEATS

Now I would of course never encourage any woman to feel that way, as I said there are many, many very legitimate and even life saving for the baby indications for having the cesarean, but still there are potential psychological effects after cesarean birth that some women will experience. And its important really, in all women, but especially women who have had a cesarean birth to assess them for potential depression or other psychological things at that six week check up, or even before that if necessary.

[27:13]

FRANK ROCHE

Dr. Keats, the question is, so as practicing physician and sort of the counsel that you give your own patients about, as you are bringing them in and doing c-sections, are there two to three things that you say to them that move them, and move the needle toward more vaginal births, or at least making that sort of decision, and obviously recognizing there are those medical situations in which a c-section is called for, but do you have recommendations for your patients about this?

[27:45]

DR. KEATS

Well, yes I do, and this is based on a publication by ACOG, a so called consenses document that they came out with in March of 2014 called Preventing the First Cesarean, and Frank you learned what that NTSV stands for, so you'll be saying it a lot, but it was a publication from about a year and a half ago, looking at strategies to reduce the need for that NTSV cesarean birth that we think is too high in multiple places.

[28:16]

DR. KEATS

And there are multiple strategies in there, one of them is not admitting patients too early in labor, so sometimes I have to counsel patients that their cervix is not very dilated, and their contractions are not close together, or they are still somewhat irregular. And it's still better to have that very early part of labor at home rather than being stuck in a bed in a hospital because the way most hospital care is delivered for birth with obstetricians, and I know midwives practice in a different fashion, which is probably admirable, but the reality is when you are admitted to a hospital labor and delivery unit you're going to be stuck in a bed.

[28:58]

DR. KEATS

And you're going to be encouraged to ambulate sometimes, but most of the time you're going to be in bed. And being in bed, flat on your back is probably not the position you want to be in during early labor. So part of it is not admitting patients too early in labor, part of it is understanding that there is something called prodromal labor which is a sometimes be a very extended period of time, typically with a first baby where you can have lots, and lots, and lots of really very strong and very regular contractions without the cervix opening up.

[29:31]

DR. KEATS

And what's happening during that time is that there actually chemical changes occurring in the cervix, those contractions are doing something, but it is something that we cannot detect with our fingers on a pelvic exam, or a cervical check during labor, but chemical changes are occurring in the cervix, and take it from a somewhat firm, stiff organ and make it very elastic, very stretchable, a cervix has to stretch very far to get over and up and around a baby's head, and the prodromal labor, those contractions are causing all of those chemical changes to occur to allow it to stretch the way it has to do, in sort of a miraculous way to allow a vaginal delivery.

[30:16]

DR. KEATS

So not admitting patients too early, recognizing this prodromal labor phase can go on sometimes for a very very long time, and then once the cervix does start to open up, recognizing that it can be a very slow process until someone gets to about six centimeters dilated, and those that are not aware of what is considered completely dilated, the cervix open or not, for the baby to pass through is ten centimeters, so generally labor can be very slow up until six centimeters, and there are many instances where people sort of jump to a cesarean delivery too quickly.

[30:51]

DR. KEATS

And sometimes you know my job is counseling patients, women in labor, and the hardest thing to do when you are taking care of a pregnant patient in labor, is to do nothing. But sometimes doing nothing is the most appropriate thing to do, and sometimes convincing the patient that being, that doing nothing and time and waiting is the appropriate course. So that's sort of the very often advice I wind up giving my patients in attempt to get them to have a vaginal birth experience rather than a cesarean.

[31:23]

DR. KEATS

The key thing is to be a good consumer of health care, be aware of what the cesarean birth rate is for the doctor or the OB group you are considering to go to. Find out what hospitals they deliver at, look at the Leapfrog data which is available now to the public, showing what the cesarean birth rate is at various hospitals.

[31:47]

DR. KEATS

If you are interested, as I said previously I believe every woman should be, if you are interested in trying to have a safe, vaginal birth with a healthy mom and a healthy new born, there are more and more of these transparency tools becoming available, and you should do your homework, you should do your research. Leapfrog has gone through a lot of trouble to collect this data, it's out there on the internet for patients, and potential patients to look at, and they should have this information in their hand when making a decision as in to where they are going to receive their obstretrical care.

[32:22]

FRANK ROCHE

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