

Chest Wall Reconstruction and Surgery with Evert Eriksson, MD, at MUSC Health Aired: February 8, 2024

Transcript

0:04
welcome to advance with MUSC health I'm
0:07
your host Aron Spain this Show's mission
0:10
is to help you find ways to preserve and
0:12
optimize your health and get the care
0:14
you need to live
0:17
well MUSC health is a leader in treating
0:20
chest wall injuries including rib
0:23
fracture care people come here from all
0:26
over the southeast and beyond for
0:28
Innovative treatments after traumatic
0:30
accidents Falls and other cases
0:32
involving rib and chest wall injuries Dr
0:36
ever Ericson is a general surgeon who
0:38
specializes in injuries to the chest
0:40
wall he's here to explain what sets MUSC
0:43
apart in this area and the hope he
0:45
offers to so many patients thank you so
0:48
much for being here thank you Erin great
0:50
to be here tell me about rib injuries
0:52
how do they typically happen and what's
0:54
recovery like so rib injuries can really
0:57

occur to almost anyone any day day you
1:00
know the typical injuries that we see at
1:02
a level one Trauma Center are people who
1:04
have fallen off of roofs fallen off of
1:06
ladders but we also see people who are
1:08
in car wrecks motorcycle wrecks and even
1:10
people who fall from standing if they
1:12
fall onto a Banister Fall onto a bathtub
1:15
or something like that can sustain rib
1:17
injuries so we really see quite a few of
1:19
them in our patients who come in through
1:20
the trauma program are these people of
1:22
all ages it is we really see it across
1:24
the board we see young people getting
1:26
injured we see people working every day
1:29
doing their job and then we see elderly
1:31
patients falling down and breaking ribs
1:33
and those because of the osteoporosis
1:35
that they have and the more brittle
1:37
bones can even be some of our more
1:38
injured patients with our elderlies tell
1:40
me about the pain that is associated
1:43
with these injuries the pain with rib
1:45
fractures can be quite crippling spans
1:47
anywhere from a kind of a nuisance pain

1:50
that people can deal with if they only
1:51
have one or two broken ribs up to
1:53
something so debilitating that they
1:54
really can't even breathe on their own
1:56
and we have to place them on a
1:57
ventilator to support their breathing
1:59
and support their pain control and the
2:01
pain doesn't end quickly this is
2:04
something that persists for quite a long
2:05
time many of these patients still have
2:07
pain one two three months out and even
2:09
out to a year some of these patients
2:11
still have often debilitating pain if
2:14
they have multiple multiple rib
2:16
fractures and a lot of people do think
2:18
of rib injuries as something that's
2:20
almost untreatable what is the current
2:22
standard of care in places that don't
2:25
have the specialized Center like MUSC
2:27
Health you know as a medical community
2:29
we've really ignored rib fractures for a
2:31
very very long time when I went through
2:33
medical school we were taught if you
2:35
have broken ribs we give you pain
2:36

medicine we support you tell you to
2:39
breathe deep and that it's going to be a
2:41
rough couple months to get over this
2:43
some patients can't do that and we have
2:45
to place them on a ventilator and
2:46
unfortunately that remains the standard
2:48
of Care at a lot of hospitals Across the
2:50
Nation now here in Charleston at muc we
2:54
have a very Innovative program where we
2:56
are treating these patients with a very
2:59
Progressive multimodal pain medication
3:01
regiment that gets a lot of them feeling
3:04
better much quicker as soon as we get
3:05
all those pain medicines started and
3:07
then for those that that's not enough
3:09
for we have a surgical rib fixation
3:12
program where we go in and surgically
3:13
repair those broken ribs and allow those
3:16
patients to breathe better and it's
3:17
remarkable how many of my patients when
3:20
they wake up in the recovery room or the
3:22
next morning when I go visit with them
3:23
tell me they feel so much better after
3:25
having that big operation than they did
3:27
the day before and that's really the

3:29
change that I'd like to see happen more
3:32
Across the Nation and the benefit of
3:34
surgical rib fixation is seen you
3:36
started this process of transforming rib
3:39
Injury Care at MUSC Health about a
3:41
decade ago tell me what motivated you to
3:43
do this yeah so about a decade ago there
3:46
were some advancements in the technology
3:48
available to us where we could finally
3:51
have plates that were specific to the
3:53
ribs and acted like ribs in their
3:57
interaction with the human body and that
3:58
change really revolutionized the care of
4:01
rib fracture patients and we saw that
4:04
when we fix these fractures with these
4:06
specialized plates we could get patients
4:07
off the ventilator quicker and finally
4:09
we had a therapy to offer these patients
4:11
to improve their outcome and really I
4:14
got into this as a critical care doctor
4:16
and as a trauma doctor trying to help
4:18
people who had such severe injuries they
4:20
couldn't breathe on their own now that
4:22
care has evolved over the years over
4:24

that decade you talk about where it used
4:26
to be only a procedure we talked about
4:28
for the Intensive Care Unit to now where
4:30
we've seen that patients with three or
4:32
more partially displaced rib fractures
4:35
and uncontrolled pain or a little bit of
4:37
difficulty breathing benefit greatly
4:39
from surgery as well where we can
4:41
actually accelerate their recovery and
4:43
knock weeks off of their recovery from a
4:46
breathing perspective and also improve
4:48
their pain control with doing this
4:50
surgery share with me some of the
4:52
success stories recently from patients
4:54
and how you've been able to really
4:56
transform their lives sure so really
4:59
kind two types of patients come to mind
5:01
one are my elderly patients and you know
5:03
a lot of people would say oh you know
5:05
I'm 70 I'm 80 years old I've had this
5:07
big trauma am I strong enough to undergo
5:10
this big operation and what we found is
5:12
that if we operate on those patients
5:15
before they get sick before they get
5:17
their pneumonia before they really

5:19
splint a lot and get a lot of lung
5:21
collapse we can actually turn that
5:23
course around prevent them from getting
5:25
pneumonia and actually decrease the
5:28
mortality rate mult M rib fractures in a
5:30
70 or 80y old can be a death sentence
5:33
the other patient that we really see a
5:35
huge benefit from is our younger
5:36
patients who we intervene early on and
5:38
operate on them we can get them to turn
5:41
around and really get back to work get
5:43
back to life get back to everything they
5:45
enjoy doing much quicker than having to
5:48
convalesce at home for multiple weeks or
5:50
months on pain medication so it really
5:52
is a a lifechanging operation for a lot
5:55
of these patients after they have a
5:57
really severe trauma ideally how soon
5:59
would you like to see a patient
6:00
after they've sustained the injury well
6:02
that's the thing time is somewhat of the
6:04
essence in this in that we want to
6:06
restore their physiology back to normal
6:09
breathing as quick as we can so ideally
6:12

we like to operate as soon as possible
6:14
and as soon as possible for us is really
6:16
within 48 to 72 hours of the injury is
6:20
ideal now we can operate at any time and
6:23
sometimes we go beyond that window and
6:25
that's okay but the greatest benefit is
6:27
found with early intervention a lot of
6:29
the treatments you've been talking about
6:31
are housed within the chest wall Injury
6:34
center this is a fairly unique Center
6:36
tell me about the concept yeah so this
6:39
came about two years ago when we
6:41
finished the chess wall injury Society
6:43
non- flail study which was a study
6:45
looking at patients with three or more
6:47
partially displaced rib fractures and
6:49
some respiratory issues and we found
6:52
that fixing those patients accelerated
6:53
their recovery and what I had seen in my
6:55
clinic was multiple patients coming to
6:58
see me two three four weeks out from
7:01
their injury who had been seen at other
7:03
local emergency rooms and these patients
7:05
clearly would have benefited from early
7:07
surgical intervention so the idea of the

7:10
chest wall injury and reconstruction
7:12
Center came out of the idea that through
7:14
tah health and through expedited clinic
7:17
visits we could take patients who were
7:19
seen one day in a emergency room
7:21
somewhere in the Low Country see them
7:23
the follow-up day and either optimize
7:26
their medical management and keep them
7:28
at home or if they were struggling with
7:30
their rib fractures bring them into the
7:31
hospital and get them operated on
7:33
quickly in order to provide the
7:35
advancements in care that we've seen at
7:36
MUSC really to the broader low country
7:39
area and try and help people you know
7:41
from state line to State Line 2021 was
7:44
pretty incredible as far as tella Health
7:46
Care goes for your clinic tell me how
7:49
extraordinary this has been to be able
7:51
to use tella Health to see patients yeah
7:53
the tella Health expansion and the
7:55
ability to provide tella Health has been
7:57
awesome for the chest o grou program you
8:00
can imagine if you have three four five
8:02

broken ribs the last thing you want to
8:03
do is get in a car and drive two or
8:05
three hours to see a doctor for 15 or 20
8:08
minutes and then have to drive two more
8:10
hours back home again what tella health
8:12
has allowed me to do is to see the
8:14
Imaging that's taken at any of the
8:16
hospitals across the low country area
8:18
talk to the patient at home via tella
8:21
Health they can stay at home where
8:22
they're comfortable we can have a very
8:24
similar type visit over the internet I
8:27
can provide them medical management over
8:29
the internet and if we need to have
8:30
surgical management we already know that
8:32
we're going to operate on them by the
8:33
time they take that 2hour drive to come
8:35
see me so it's really optimize the
8:37
patient care and the patient experience
8:40
with their injuries and not
8:41
inconvenience them with the need to get
8:44
out of their house drive all the way to
8:46
Charleston from wherever they're living
8:48
and then have to drive back home again
8:50
so it's really been a very patient

8:51
Centric expansion and has been a great
8:54
thing for the chest wall program and
8:55
allowed us to really expand the care of
8:58
these patients beyond the Charleston
9:01
area yeah in 2021 the rib clinic visits
9:04
increased
9:05
320% with more than 58% of those through
9:08
tella Health that's a pretty incredible
9:10
statistic it's been an amazing expansion
9:14
and we're seeing a whole lot of patience
9:16
and it it was one of those things you
9:18
have this vision of something you want
9:19
to build and you think it'll take off
9:21
but you underestimate how big it could
9:23
really be and this has really exploded
9:25
for me to the point where I don't do
9:27
regular general surgery all that much
9:29
anymore I do almost purely rib based
9:31
surgery and you have people coming in
9:33
from the East Coast West Coast Midwest
9:35
to see you in the clinic yeah we do for
9:38
post-traumatic injuries we've had
9:39
patients come from almost every state
9:42
around us Florida Georgia North Carolina
9:45

Tennessee and Kentucky I can think of
9:47
particular patients who have come from
9:49
all those states to be seen after
9:51
they've had acute chest wall injuries
9:53
whether that's flail chest or thoro
9:55
abdominal hernas or that type of thing
9:58
and then the reaches become become even
10:00
larger when you look at the other rib
10:02
conditions that we treat through the
10:03
chest wall Center such as slipped rib
10:05
and Rib tip syndrome we've had patients
10:07
come from as far as California and
10:09
Washington State as well as New York and
10:11
Florida for that treatment what are
10:13
those conditions tell me a bit more
10:15
about rib tip syndrome slip D and Rib
10:18
tip syndrome are these entities that are
10:21
not well known by the medical community
10:23
it isn't traditionally taught in medical
10:26
school and these are conditions where
10:27
you have in the case of slipped rib
10:29
syndrome you have a hypermobility or a
10:32
increased mobility of the edge of the
10:34
chest wall where your chest meets your
10:36
belly and if those ribs can move more

10:40
than the normal person's ribs move they
10:43
can actually come up and impinge a nerve
10:46
there's a nerve that runs on the bottom
10:47
of every rib and it can actually come up
10:49
and pinch that nerve on the underside of
10:51
the rib above it and when that happens
10:53
those patients have Exquisite pain and
10:55
that pain can extend onto their abdomen
10:58
it can extend back to their back and it
10:59
can be quite debilitating and for a lot
11:01
of these patients it's an extremely
11:03
frustrating condition to have because
11:05
they're told by a lot of medical
11:06
professionals there's nothing wrong with
11:08
you you do traditional Imaging and
11:09
nothing shows up they say you know what
11:12
there's nothing there you need to be on
11:14
anti-depressants some nerve problem it's
11:16
in your head and they're told this over
11:17
and over again and it's not uncommon for
11:19
patients to have had surgeries done for
11:22
different things that they think this
11:23
may be whether it's gallbladder disease
11:25
or reflux disease or something like that
11:27

have multiple Imaging done and seen tons
11:29
of practitioners who don't diagnose them
11:32
with this and then eventually they
11:34
finally find their way to someone who
11:35
knows what it is and they see me in
11:37
clinic and it is just crystal clear this
11:39
is the problem we take them to surgery
11:41
and a few months later they feel
11:43
considerably better you talked a lot
11:45
about the pain involved with this and
11:47
I'm sure a lot of people are just using
11:49
narcotics and trying to get through the
11:50
day is that something that's a concern
11:52
for some of these patients before
11:54
they're able to find an expert like you
11:56
oh absolutely and many of them have
11:58
histories of being being suicidal having
12:00
overdoses taking too much pain medicine
12:03
all those types of things are very
12:04
common symptoms that we see with these
12:06
patients with chronic pain be it from
12:08
either non-union rib fractures or
12:11
slipped rib syndrome some of the other
12:13
rib syndromes that can cause
12:15
considerable pain and these patients are

12:17
just trying to find the right person who
12:20
knows about these diseases to treat them
12:22
and that's why the rib Center so
12:23
important at meoc is we've seen all
12:26
these different diseases and we know how
12:28
to treat them and not only are you
12:30
performing surgeries there there's some
12:32
wraparound care that happens with all of
12:34
these patients tell me about some of the
12:36
other treatments that are offered that
12:38
really helps them make a full recovery
12:40
there are so surgery is not the complete
12:43
answer to any of this we have a great
12:46
pain medication regiment that we put
12:48
people on as well as we have a lot of
12:51
Specialists that help us out with this
12:52
and part of it Physical Therapy
12:54
occupational therapy there's ultrasonic
12:56
therapy that can help with bone healing
12:58
and bone remodeling we also have
13:01
Interventional Radiologists and
13:03
physiatrists that can provide nerve
13:05
injections Andor other injections to
13:08
mediate the pain that comes from some of
13:10

these non-union fractures and some of
13:13
these fractures like when I talked about
13:14
the nerve that runs with the every rib
13:16
when you break that rib sometimes you
13:18
injure that nerve too and that can set
13:20
up a situation for chronic pain so we
13:22
have a chronic pain management group
13:24
that can also help optimize these
13:26
patients so they live a better life expl
13:29
what rib plating is and what Innovations
13:31
are taking place at MUSC Health to offer
13:33
these types of surgeries yeah we've done
13:35
a couple Innovative things here with
13:38
respect to rib plating there is a way to
13:40
suture repair some of the costal
13:42
cartilage that really provides a nice
13:44
construct there that's very very stable
13:46
we use that quite a bit in the slipped
13:48
rib syndrome but I also use it in some
13:50
of my trauma patients we've also
13:52
innovated in the way that we fix sternal
13:55
fractures and reduce the sternal
13:56
fractures with using some specialized
13:58
instruments and then the opportunity to
14:00
place plates both intrathoracic and

14:03
extrathoracic along the rib cage is a
14:05
very unique surgical technique that's
14:08
only available a few places and we've
14:09
been pioneering that here at MUSC rip
14:12
plating itself is a surgery where we go
14:15
in in a minimally invasive way so we try
14:19
and minimize the size of our incisions
14:21
we try to not cut any muscles or split
14:24
the muscles in a way that the recovery
14:26
is accelerated by that and then we Place
14:29
titanium plates across the fractures and
14:32
then hold them in place with specialized
14:34
screws that screw down into the bone and
14:36
hold the plate and the fracture in good
14:39
position so that they don't move and you
14:41
can get normal bone healing if you break
14:43
your arm they orthopedic surgeons will
14:45
put you in a cast to keep it from moving
14:47
we can't put a cast on the chest wall so
14:50
we need to go in and put some plates on
14:52
there to stabilize those ribs and that's
14:54
really what helps them recover
14:55
fortunately we have some very advanced
14:58
surgical techniques and surgical
15:00

instruments that allow us to do this
15:01
through very small incisions how are you
15:03
able to share your knowledge with other
15:05
surgeons not only at MUSC Health but
15:07
around the country well at MUSC we have
15:10
a fairly robust research program here
15:13
regarding chest wall injuries and chest
15:15
wall reconstruction and recovery and we
15:17
try to publish those results and talk
15:20
about those results at National meetings
15:22
the other area that's really been
15:24
revolutionary for the chest wall injury
15:27
Community was the development of the chest
15:29
wall injury society and that started
15:31
about six years ago and it's a group of
15:34
international thought leaders from
15:36
really everywhere who get together
15:39
present their data do collaborative
15:41
studies where we do international
15:43
studies on chest wall reconstruction and
15:45
have really tried to move the needle and
15:48
prove the benefit of surgical
15:50
stabilization of rib fractures and that
15:52
group's done a phenomenal job of that
15:55
and really a lot of the big thought

15:56
leaders have accelerated each other's
15:58
thoughts through that collaboration why
16:00
would you encourage caregivers listening
16:03
to look into bringing their loved one to
16:05
MUSC Health if they have a rib fracture
16:07
or chest wall injury I think that's a
16:10
great point you know the vast majority
16:11
of trauma patients are men and let's
16:14
face it a lot of guys don't tend to look
16:16
for health care they tend to want to
16:19
deal with it at home and that may or may
16:21
not be the best decision really the
16:24
debilitating effect of rib fractures is
16:26
the thing that can't be understated it's
16:28
not something that goes away if you are
16:31
someone who uses your hands to work if
16:33
you're a carpenter if you're a mechanic
16:35
even a surgeon such as myself if you
16:37
break your ribs chances are you're not
16:40
going back to work again if you have a
16:41
fla chest if you have multiple rib
16:44
fractures 66% of patients who have
16:47
manual labor type jobs don't go back to
16:49
work again now that statistically
16:51

improves significantly with rib fixation
16:54
and restoring the chest wall and making
16:57
it work properly again and that's really
17:00
what we're trying to do is we're trying
17:01
to get people back to their normal life
17:03
is there anything else that we didn't
17:05
get to that you'd like to reiterate or
17:07
share yeah I think that rib fractures
17:10
are not just pain medicine and
17:12
conservative treatment anymore rib
17:15
fractures require a multidisiplinary
17:17
team to optimally care for those
17:19
patients not everybody gets a surgery
17:21
very very few patients ultimately
17:23
transition onto surgery but the kind of
17:25
multi-dimensional treatment that comes
17:27
from a chest walls program is important
17:30
for the optimal care of patients with
17:32
rib fractures and I think that's an
17:33
important point to make that we've had
17:35
so many advances since many of us went
17:37
to medical school the general community
17:39
and the General Medical Group really
17:42
need to be re-educated on what the
17:44
Optimal Care is for this injury how long

17:47
does it take from the point of someone
17:48
reaching out to the center after an
17:50
injury to be able to see you and your
17:51
team so we have teleah health available
17:54
five days a week weekends access is a
17:57
little bit more limited and then we have
17:59
a clinic uh one day a week and that's
18:01
likely expanding to two days a week soon
18:03
what do you do to optimize your health
18:05
and live well I try to eat well try to
18:08
exercise my wife would probably tell you
18:09
I don't do a good job of either one of
18:11
those on a regular basis but try to be
18:13
healthy and then you know we live in the
18:15
Low Country so going to the beach going
18:17
out on the boat going fishing and
18:18
walking around and playing with the dog
18:20
and the kids keeps me busy thank you so
18:22
much for coming on the show and sharing
18:24
these great improvements that have been
18:26
made in recent years and we look forward
18:27
to seeing what happens next with the
18:30
expansion of the center well thank you
18:32
very much thanks for having me and I'm
18:33

excited to see where all this leads as
18:36
[Music]
18:38
well for more information on this
18:41
podcast check out advance. MUSC
18:43
health.org

English (auto-generated)