

Starting a casting program

Lindsay Andras MD

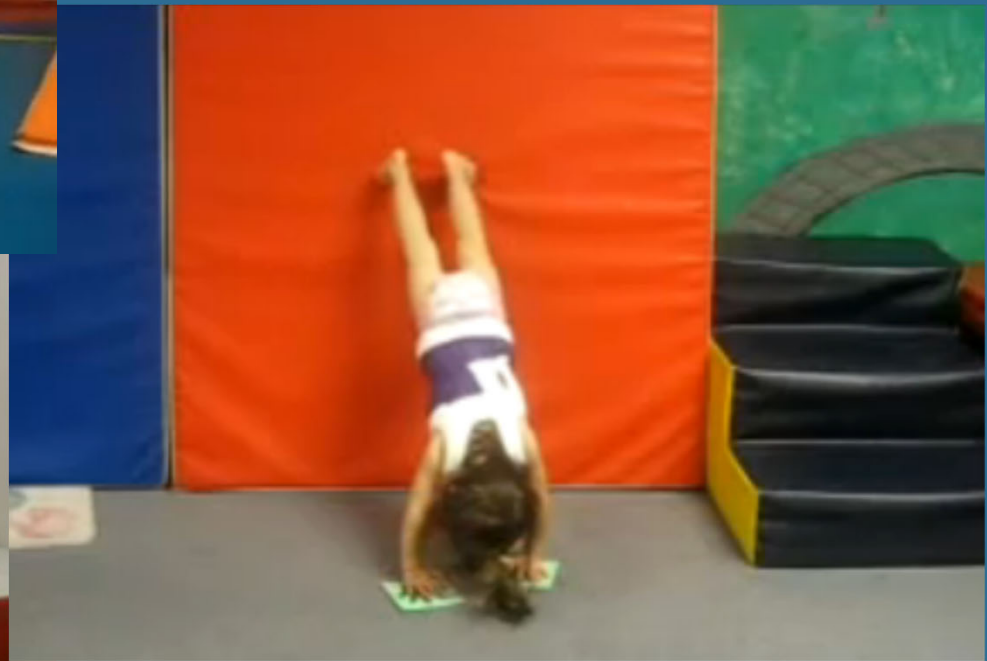


1. Preparing the parents
2. Supplies
3. Preparing the team
4. Pitfalls to avoid

Preparing the parents



Youtube: Child with progressive scoliosis in a derotational cast
<http://youtu.be/aBwEG6IEjgY>

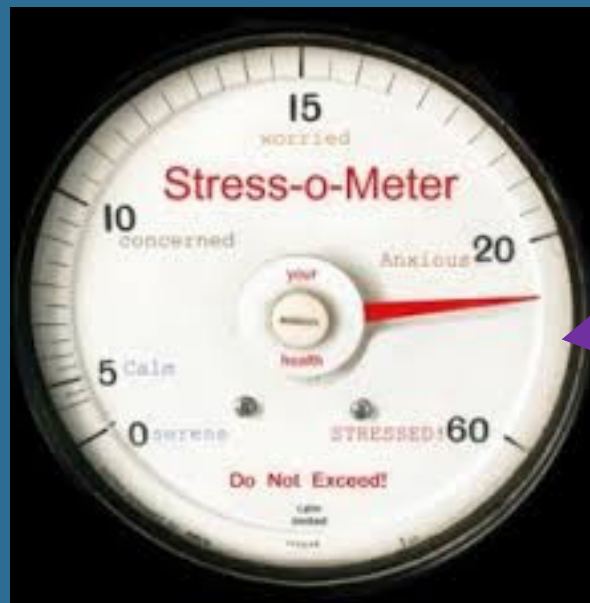


Preparing the parents

Website for infantile scoliosis outreach program

<http://www.infantilescoliosis.org/index.html>

(instructions on cast care and tips from parents)



caring for a
toddler in
a cast

Preparing the parents

- Instructions on changing jerseys
 - youtube video: <http://youtu.be/dJKzjCxYX0M>
 - handout



- Purchasing jerseys directly from knit-rite
 - email them for a provider code (\$30/jersey)

Supplies

Slides down for casting



Can put
patient to
sleep
directly
on table

Robert Eldridge
Pillar Orthopedic Design L.L.C.
360-773-8779
<http://www.pillarorthopedicdesign.com/>

Supplies

- Jerseys
- Stockinette (Standard)
- Head Halter
- Synthetic Cast Padding
- Felt
- Cellona plaster
(large and small rolls)
- Fiberglass(Standard)
- Staple gun (1/4" staples)

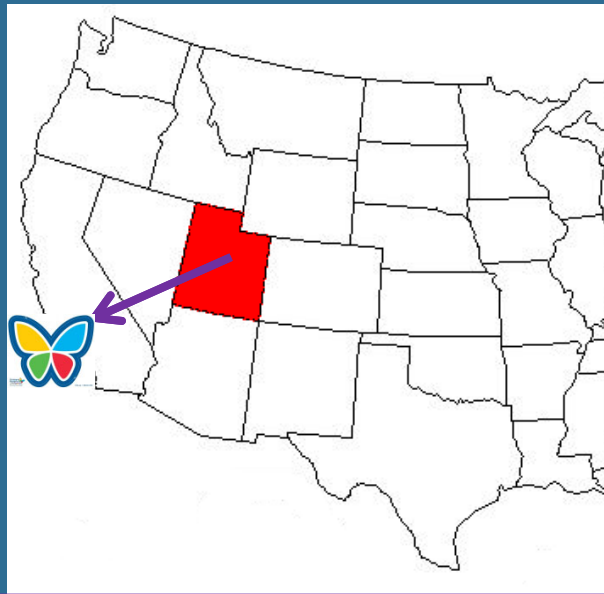


Supplies

Item	Vendor	Item#	Phone #
Head Halter-12 Per Box	Zimmer	0912	(801) 266-9292
Arrow Staples	Home Depot	JT21=1/4" (VERY IMPORTANT)	
Cotton Undercast Padding 2", Specialist 100, Blue Package	BSN Medical	9082	
Cotton Undercast Padding 4", Specialist 100, Blue Package	BSN Medical	9084	(800) 552-1157
1/4" Felt Padding	Cascade Orthopedic Supply	WPF-250, order by the yard	(800) 888-0865
1/8" Felt Padding	Cascade Orthopedic Supply	WPF-125, order by the yard	(800) 888-0865
Torso Interface, Turtleneck with X-Static, Size Small	Knit-Rite	1BX1BTSM	(800) 821-3094
Torso Interface, Turtleneck with X-Static, Size Medium	Knit-Rite	1BX1BTMD	(800) 821-3094
Cellona Extra Creamy Plaster Bandages, 4"	Cascade Orthopedic Supply	91162	(800) 821-3094
Cellona Extra Creamy Plaster Bandages, 24"	Cascade Orthopedic Supply	20302	(888) 938-7828

Preparing the team

Find out who is going to do the anesthesia and have them talk to an anesthesiologist at a place that casts regularly



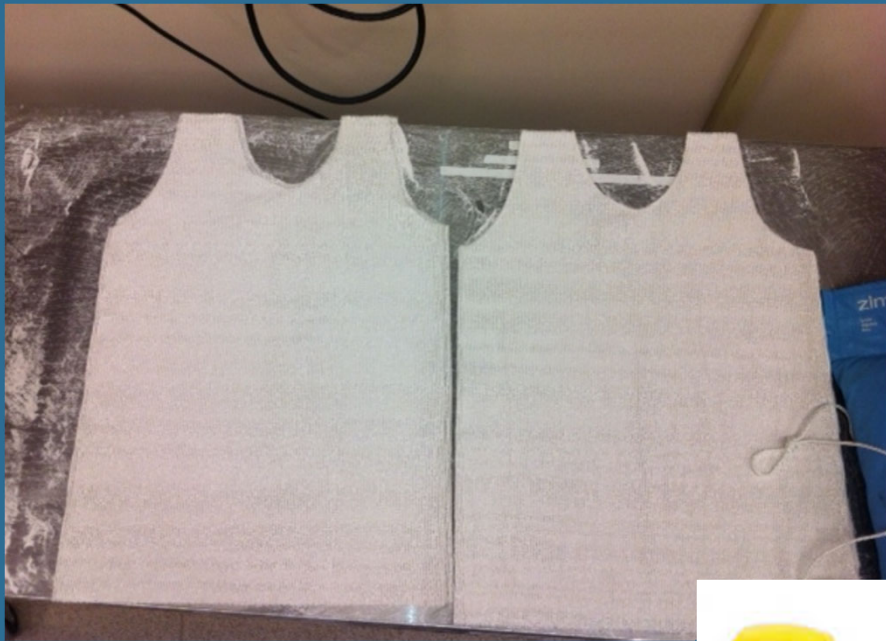
Dr. Cyrus Kermani
ckermani@chla.usc.edu

USC University of
Southern California

Children's
Hospital
LOS ANGELES
CHILDREN'S
ORTHOPAEDIC CENTER

Preparing the team

Lay out supplies and Write Out Steps



1. 2 layers stockinette
2. Transfer to casting table
3. Tie hips to table (cross over iliac crest)
4. Apply head halter traction
5. Secure arms- concave higher than convex
6. Felt pads
7. Wrap with cast padding
8. Practice Mold
9. Plasters sheaths on front and back
10. Wrap with plaster rolls
11. 3 person mold
12. Overwrap with fiberglass
13. Overwrap with wet Ace
14. Transfer back to bed
15. Cut out abdominal window, bottom, neck, arms, back window
15. Staple and moleskin



Preparing the team

Practice Run



Tell them it will take 3 hours
(usually takes a little under 2 hrs)

Preparing the team



2. Hip Mold

**3. Flexion Derotation
(attending)**

**1. Counter traction
on convex shoulder
(least experienced person)**

3 people to mold- Practice after cast padding is rolled before plaster

Pitfall 1

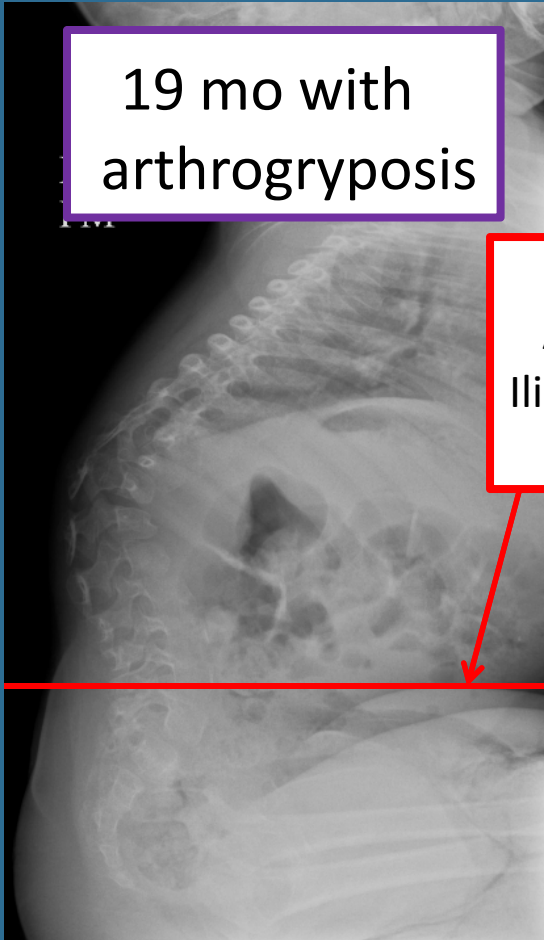
Not cutting stockinette long enough to go over head/hair



Pitfall 2

Well padded kids

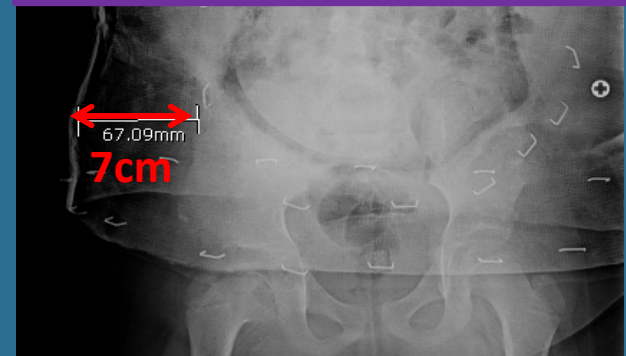
19 mo with
arthrogryposis



Chubby thighs
Above the level of
iliac crest when sitting=
impossible to mold



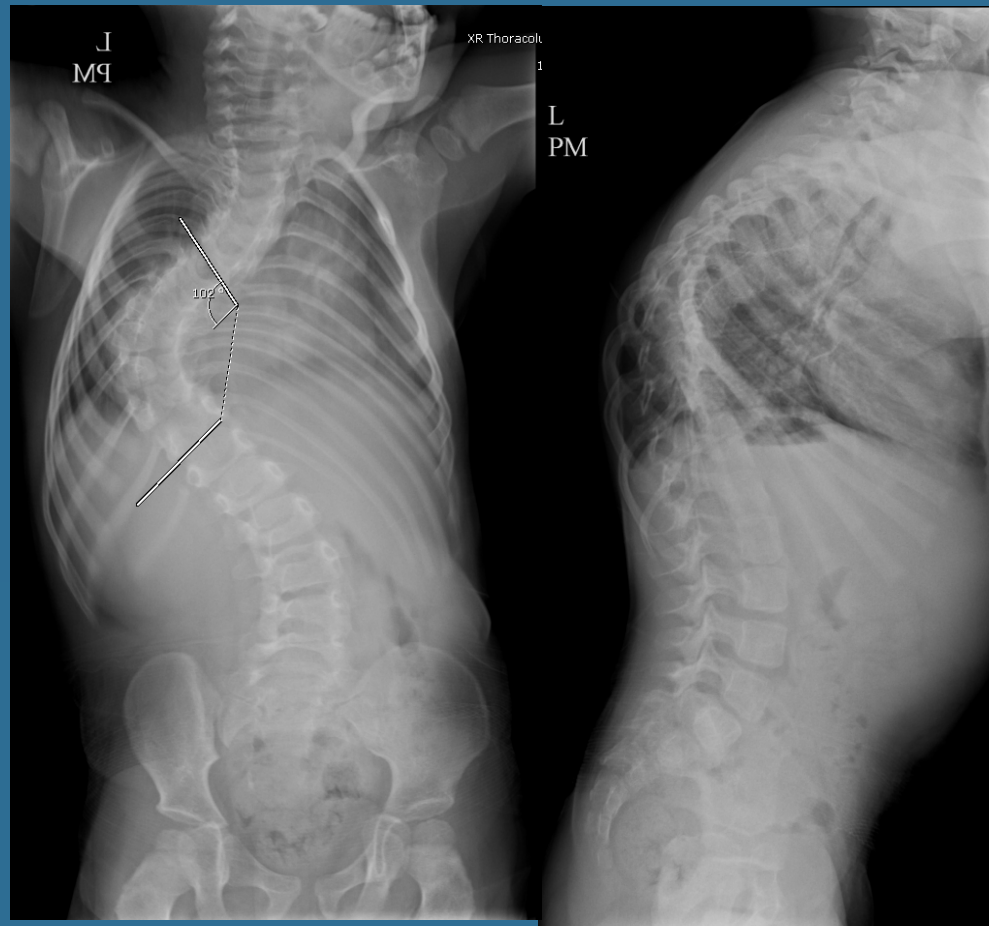
6 yo with Prader Willi
that weighs 110lbs=
Epic Cast Failure



Pitfall 3

High riding casts

2 yo male with 100
degree thoracic curve
(MRI negative)

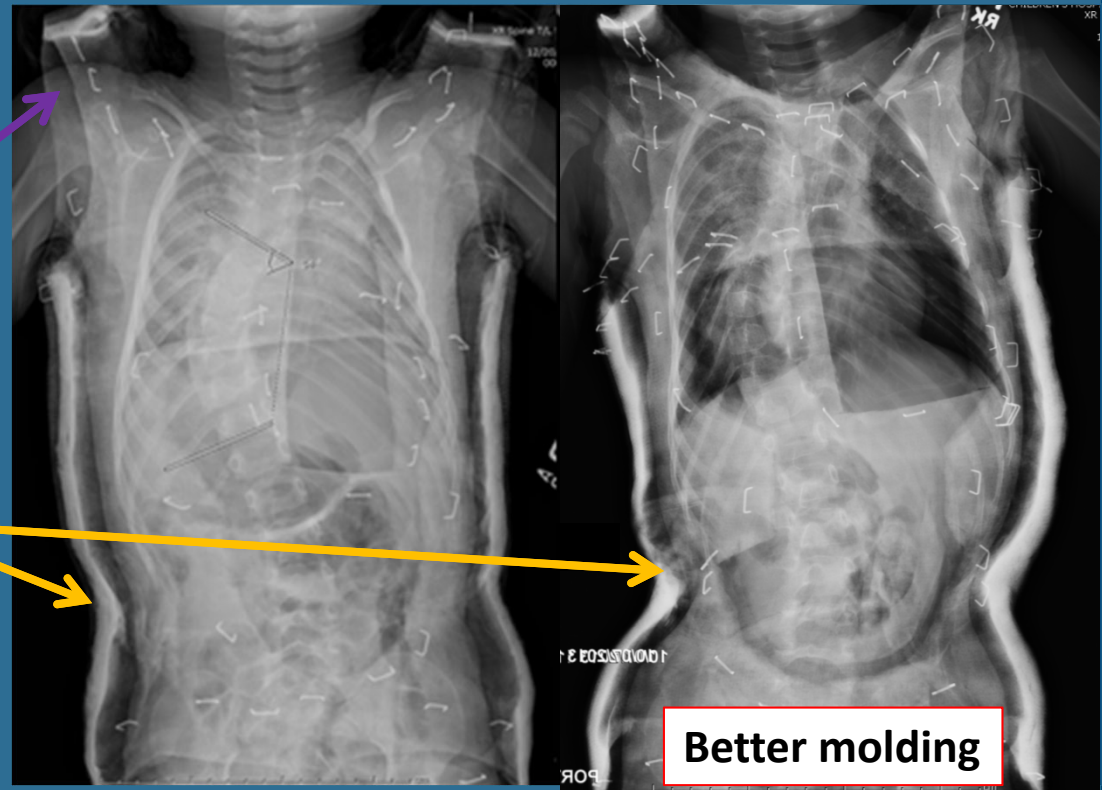


Pitfall 3

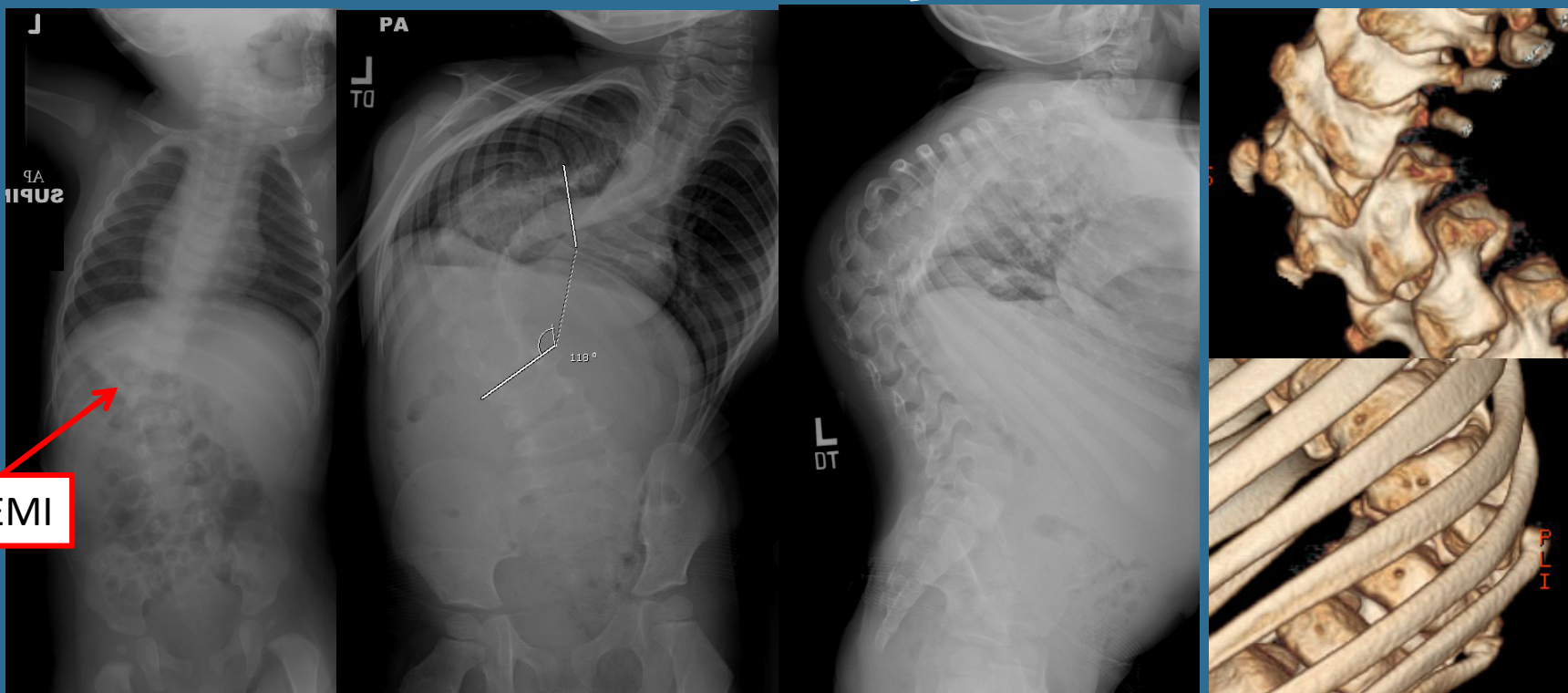
High riding casts

Arms positioned too high when casting

Not enough iliac crest mold



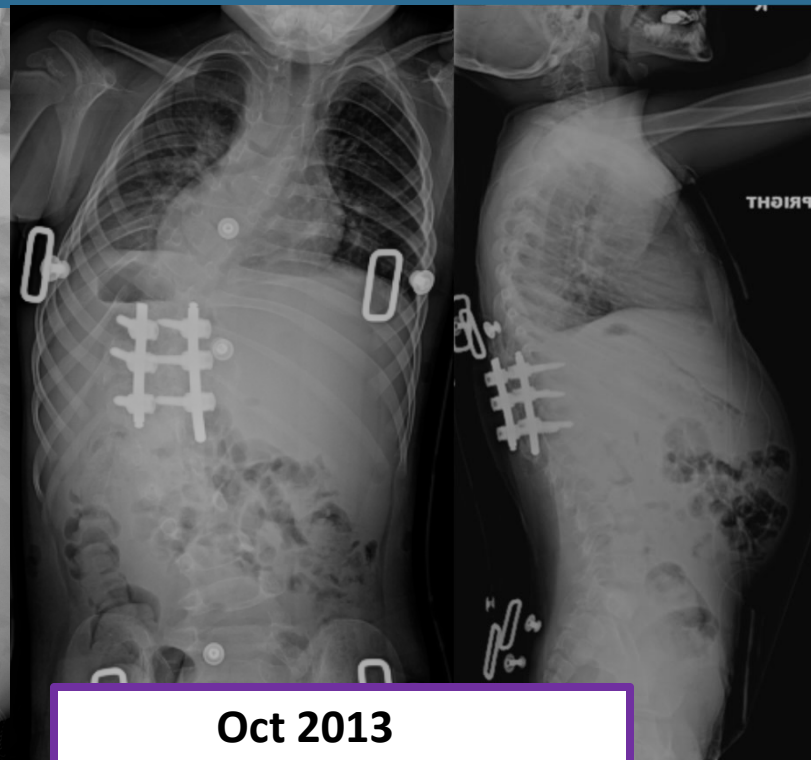
4yo male with VATER syndrome and hemivertebrae at thoracolumbar junction



HEMI

Seen at 6 mo
Lost to followup

4yo male with VATER syndrome and hemivertebrae at thoracolumbar junction





THANKS to David Skaggs, Vernon Tolo, Paul Choi and Jacques D'Astous

