

Les traumatismes vasculaires des membres chez l'enfant

A.BENZIRAR, A.OULEDTAYEB, A.REZZIKI, O.ELMAHI

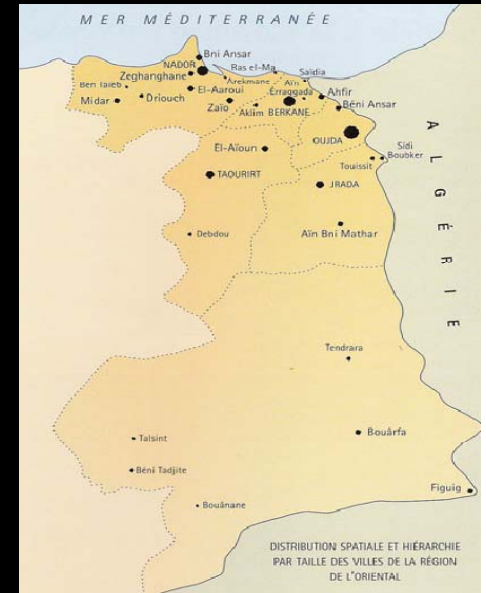
CHU Mohammed VI OUJDA - MAROC

➤ Rares.

➤ Difficultés diagnostiques et thérapeutiques.

➤ Prise en charge multidisciplinaire

- Type: Étude **rétrospective descriptive et analytique.**
- Durée: Janvier 2009 - Juillet 2014.
- Population: 9 patients de < 18 ans .



EPIDÉMIOLOGIE

Auteurs	Durée et période de l'étude	Nombre de cas
De Virgilio	10 ans (1984–1994)	48
J. Jaipuria	5 ans (2007–2012)	82
R. Shah	6 ans (2000–2006)	42
J.casey	12 ans (2000–2012)	103
M. de Moraes Silva	10 ans (2000–2010)	37
Notre série	5 ans (2009–2014)	9

Résultats et Discussion

L' ÂGE

Auteurs	nombre de cas	Moyenne d'âge
D.Barmpras	103 cas	10.7 ans
J. jaipuria	82 cas	10 ans
R. Shah	42 cas	9.8 ans
J.CASEY	30 cas	15 ans
Notre série	9 cas	12 ans

Résultats et Discussion

LE SEXE

Auteurs		M	F
Debeugny	94 cas	75%	25%
Whitehouse	21 cas	85%	15%
J.CASEY	103 cas	85%	15%
J. Jaipuria.	82 cas	82%	18%
M. de Moraes.	37 cas	81%	19%
R. Shah	42 cas	64%	36%
Notre série	9 cas	89%	11%

ÉTIOLOGIES ET MÉCANISMES

Auteurs	Nombre de cas	Plaie franche	Plaie contuse
Eren	91	77 %	23 %
Debeugny	94	58 %	42 %
Evans	92	73 %	27 %
M. de Moraes Silva	37	57 %	43 %
J. jaipuria	82	44 %	56 %
Notre série	9	78 %	22 %

ÉTIOLOGIES ET MÉCANISMES

0 à 2 ans → iatrogène.



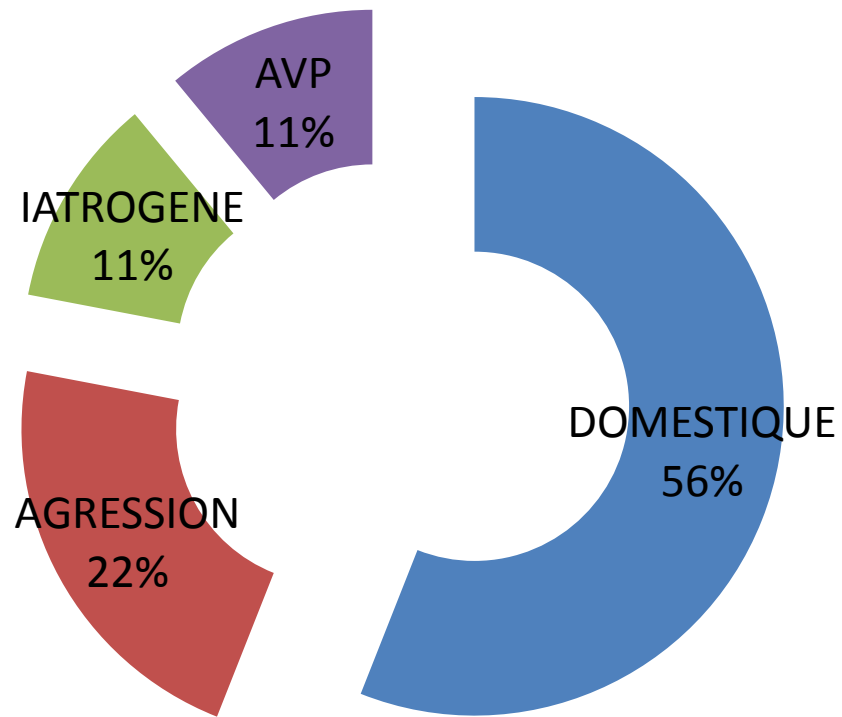
5 à 10 ans → accidents domestiques graves (**plaie par verre++**)



Photo: Istock

14 à 18 ans → trafic et violence urbaine.





LE DÉLAI

Auteur	Délai moyen	Délai < 6h
Evans	-	66%
Debeugny	-	40%
J. jaipuria	8 h	-
M. nazem	3,2 h	-
Notre série	5.2 h	66%

Résultats et Discussion

TOPOGRAPHIE LÉSIONNELLE

Auteurs	Nombre de cas	Membre sup.	Membre inf.
Evans	92	72.2 %	27.8 %
Debeugny	94	70.2 %	29 %
J. jaipuria	82	65 %	35 %
J.CASEY	103	54 %	46 %
De Virgilio	48	40.5 %	59.5 %
Mommsen	42	38.6 %	61.4 %
Notre série	9	34 %	66 %

Résultats et Discussion

TOPOGRAPHIE LÉSIONNELLE

	Debeugny	Evans	De Virgilio	Shah	Notre série
Axillaire	4.3%	7.1%	8.1%	0%	0%
Humérale	21.7%	21.4%	5.4%	31%	12%
Vaisseaux de l'avant-bras.	44.6%	40.3%	2.7%	28.5%	22%
Fémoral	10.9%	13.1%	48.6%	12%	22%
Poplité	9.8%	8.3%	5.4%	7%	22%
Axe de jambe	8.7%	9.5%	5.4%	9.5%	22%
Autres				12%	

LES SIGNES CLINIQUES

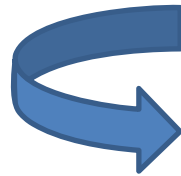
	Debeugny	Evans	Wolf	Notre série
Sd ischémique	37%	33%	24%	25%
Sd hémorragique	60%	30%	30%	25%
Masse battante	3%	32%	14%	37.5%
Masse + thrill	–	5%	–	–
Etat de choc	–	–	12%	12.5%
Anémie	–	–	20%	–
Plaie sèche	–	–	–	12.5%

LES EXAMENS PARACLINIQUES :

- Echo-Doppler → 3 patients
- Artériographie → un seul malade
- Angioscanner → un seul malade

TRAITEMENT

Les principes de base du traitement chez l'adulte



l'enfant

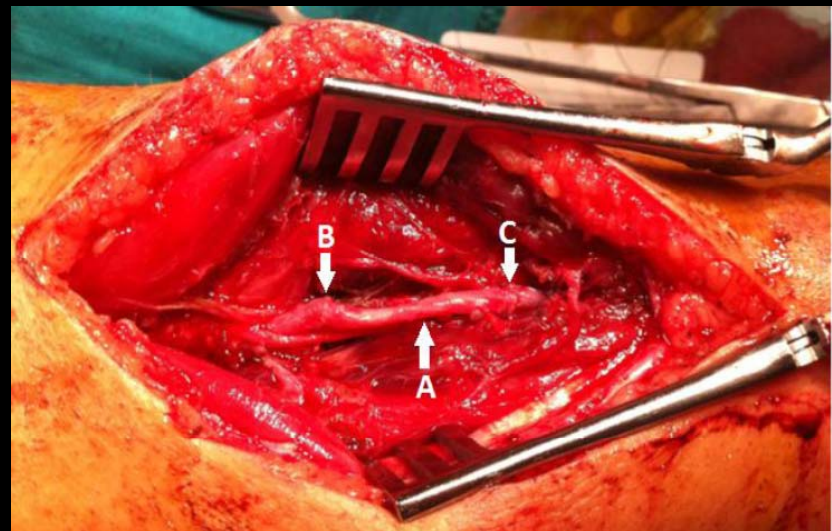
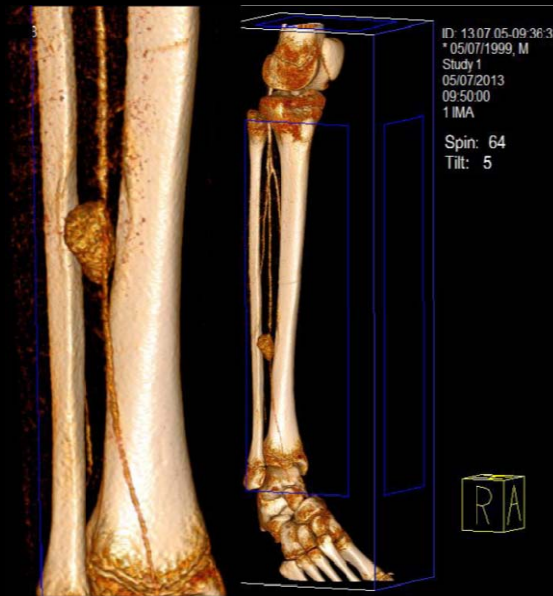
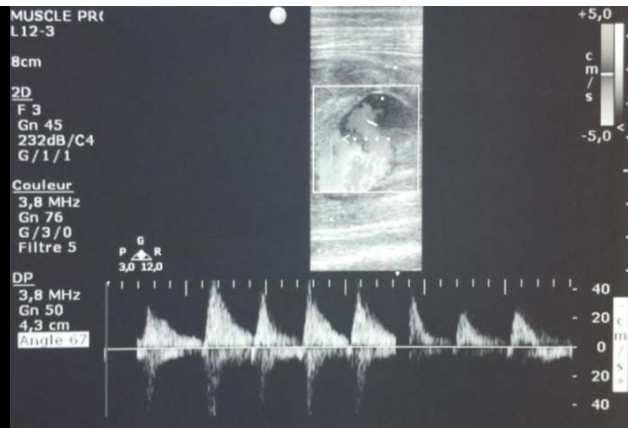
Calibre des vaisseaux

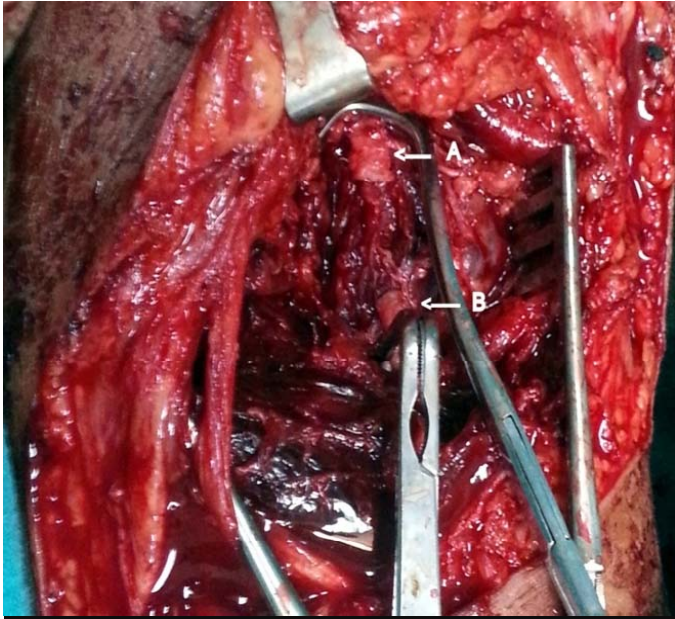
Tendance au vasospasme

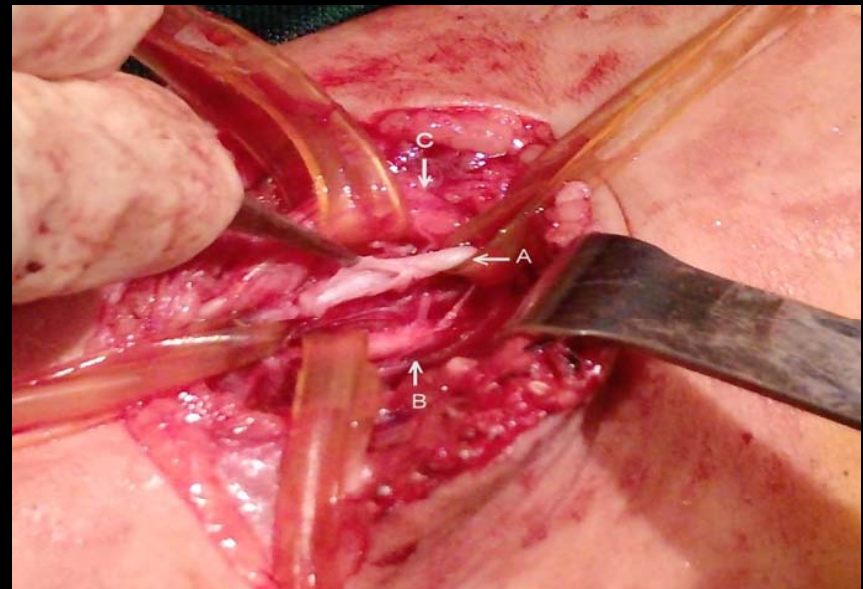
croissance

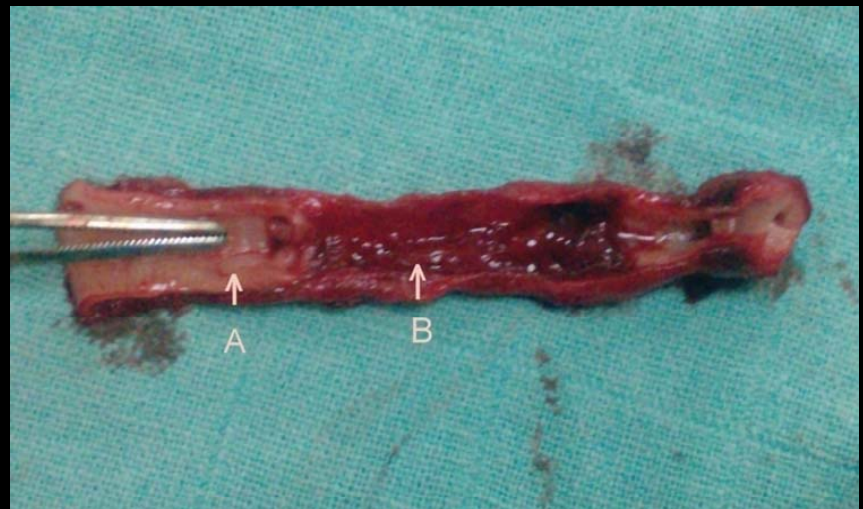
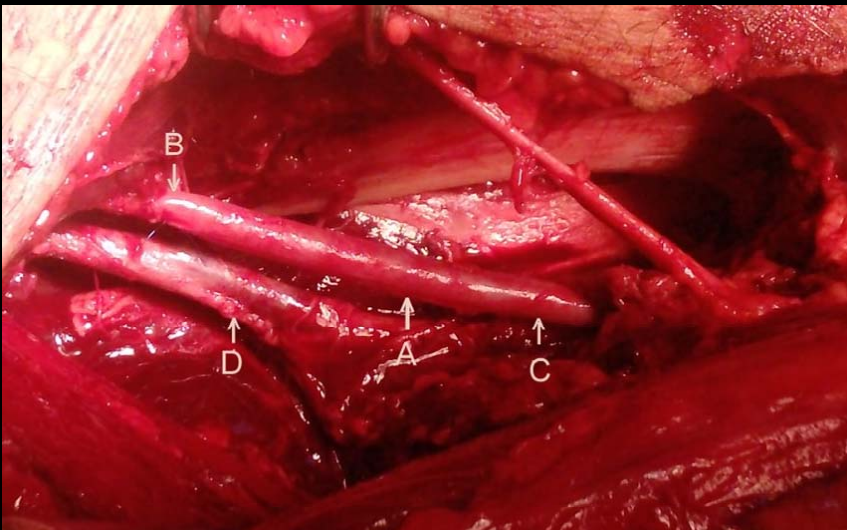
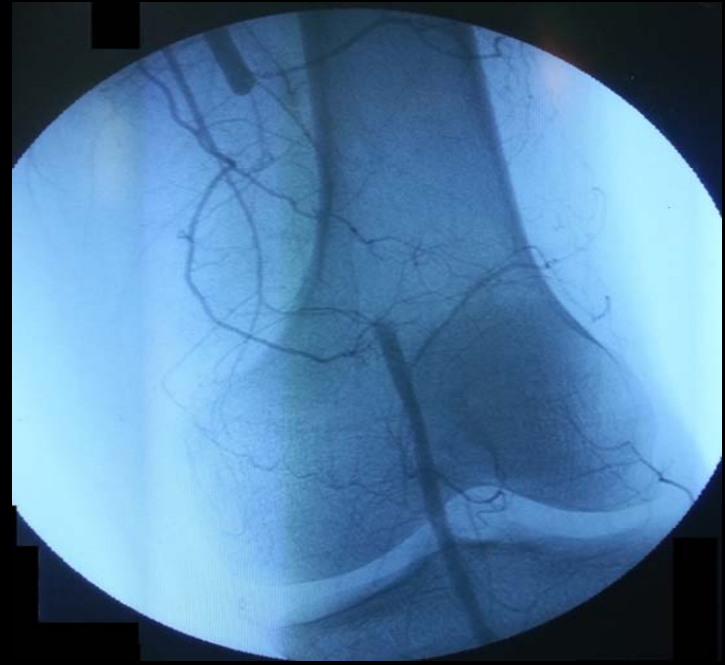
TRAITEMENT

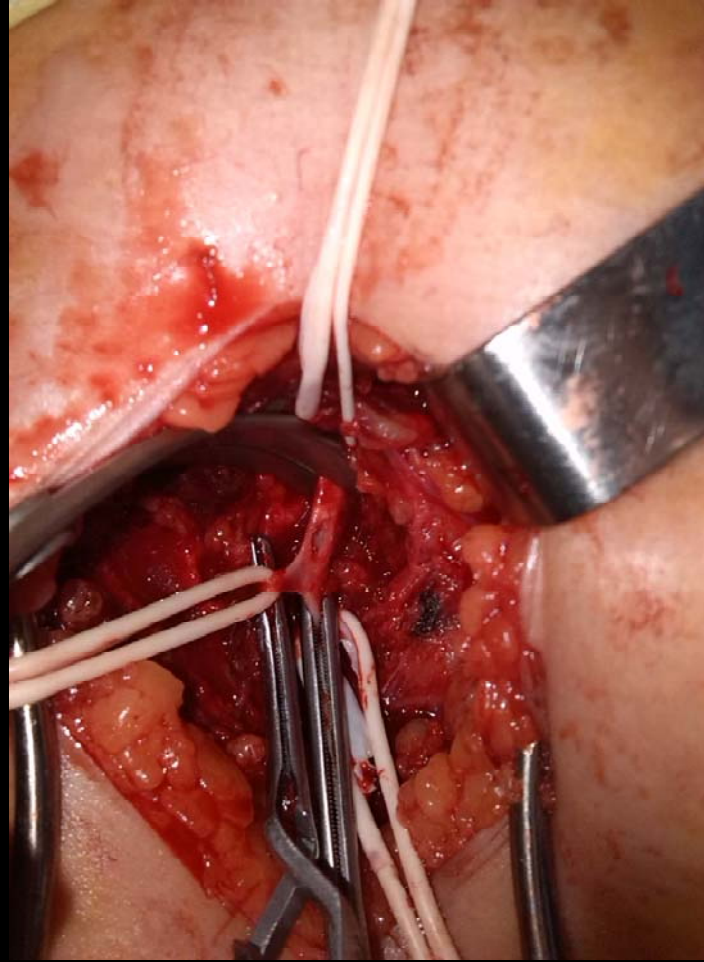
- MODALITES DE LA REPARATION VASCULAIRE:
 - La suture
 - Le pontage
 - La ligature artérielle











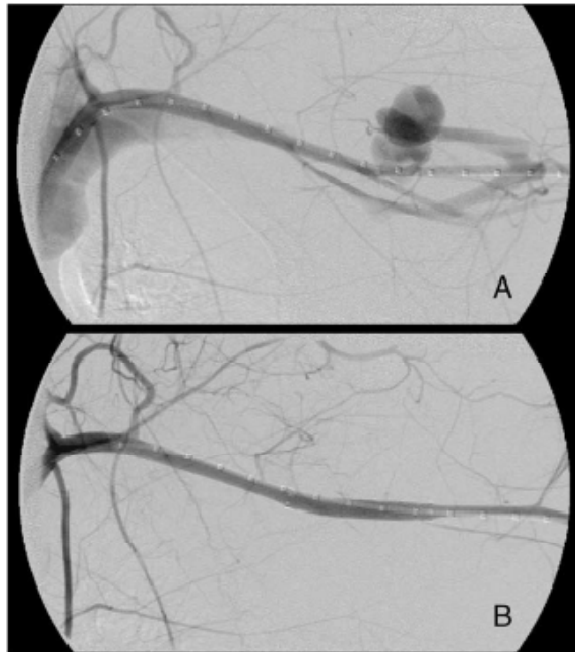
Endovascular stenting of a penetrating axillary artery injury in a 14-year-old with 1-year follow-up

Henry L. Chang^a, Virendra I. Patel^b, David C. Brewster^b, Peter T. Masiakos^{a,*}

^a*Department of Pediatric Surgery, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA*

^b*Department of Vascular Surgery, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA*

Received 16 July 2008; revised 19 August 2008; accepted 20 August 2008



Blunt femoropopliteal trauma in a child: Is stenting a good option?

Domenico Angiletta, MD, Giovanni Impedovo, MD, Federico Pestrichella, MD, Vincenzo Marotta, MD,
Francesco Perilli, MD, and Guido Regina, MD, *Bari, Italy*



Pediatric vascular injury: experience of a level 1 trauma center

Casey J. Allen, MD,^a Richard J. Straker, BS,^a Jun Tashiro, MD, MPH,^b Laura F. Teisch, BS,^a Jonathan P. Meizoso, MD,^a Juliet J. Ray, MD,^a Nicholas Namias, MD,^a and Juan E. Sola, MD^{b,*}

^a Division of Trauma Surgery, DeWitt Daughtry Family Department of Surgery, University of Miami Miller School of Medicine, Miami, Florida

^b Division of Pediatric Surgery, DeWitt Daughtry Family Department of Surgery, University of Miami Miller School of Medicine, Miami, Florida

Table 4 – Management by location of MVI.

Extremity	Repair	Ligation	Amputation	Shunt	Endovascular	Nonoperative	Total
Common femoral artery	9	—	1	—	—	—	10
Common femoral vein	4	1	1	—	—	—	6
Superficial femoral artery	10	1	1	—	—	—	12
Superficial femoral vein	1	—	—	—	—	1	2
Deep femoral artery	—	—	1	—	—	—	1
Popliteal artery	8	—	—	—	—	—	8
Popliteal vein	1	—	—	—	—	—	1
Anterior tibial artery	2	—	1	—	—	—	3
Posterior tibial artery	—	2	1	—	—	—	3
Axillary artery	4	—	—	—	—	2	6
Brachial artery	4	1	2	—	—	2	9
Ulnar artery	1	—	1	—	—	1	3
Radial artery	2	—	2	—	—	—	4
Abdomen/pelvis							
Abdominal aorta	1	—	—	—	—	—	1
Inferior vena cava	4	1	—	—	—	—	5
Superior mesenteric artery	—	—	—	—	—	1	1
Superior mesenteric vein	—	—	—	—	—	1	1
Renal artery	2	—	—	—	—	2	4
Hepatic artery	1	—	—	—	—	—	1
Portal vein	2	—	—	—	—	—	2
Splenic vein	1	—	—	—	—	—	1
Splenic artery	—	1	—	—	—	—	1
Other mesenteric artery	2	—	—	—	—	2	4
Internal iliac artery	—	—	—	—	2	—	2
Common iliac artery	3	1	—	3	—	2	9
Common iliac vein	1	3	—	—	—	1	5
Chest/neck							
Thoracic aorta	2	—	—	—	1	—	3
Subclavian artery	1	—	—	—	—	1	2
Subclavian vein	1	—	—	—	—	—	1
Common carotid artery	2	—	—	—	—	4	6
External carotid artery	1	—	—	—	—	—	1
Internal carotid artery	1	—	—	—	—	2	3
Internal jugular vein	4	—	—	—	—	—	4
External jugular vein	—	2	—	—	—	—	2
Total	75	13	11	3	3	22	127

Total vascular injuries in cohort = 127.

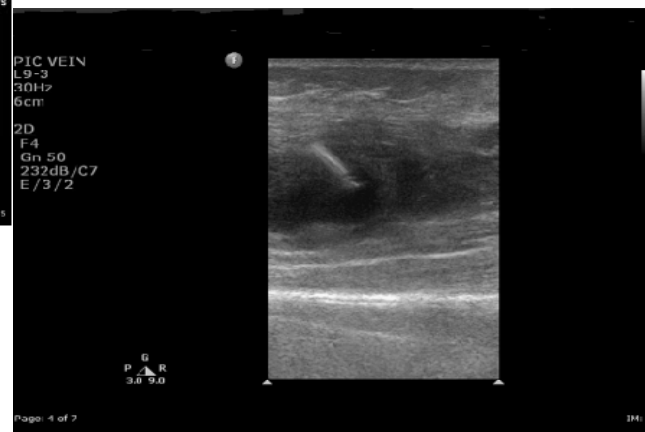
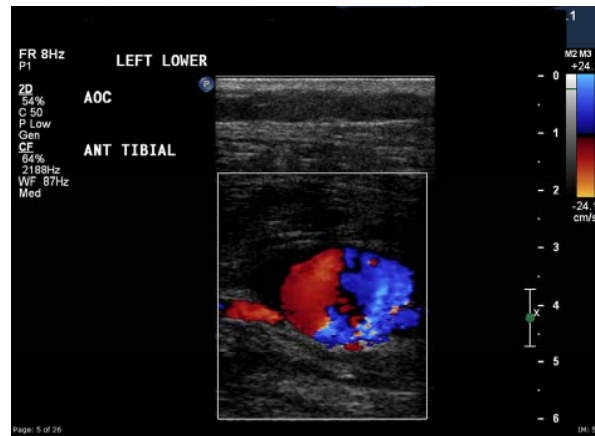
Traumatic pseudoaneurysm of the anterior tibial artery treated with ultrasound-guided thrombin injection in a pediatric patient

Jason D. Fraser^a, Brent E. Cully^b, Douglas C. Rivard^b, Charles M. Leys^a, George W. Holcomb III^a, Shawn D. St. Peter^{a,*}

^aDepartment of Surgery, The Children's Mercy Hospital, Kansas City, MO 64108, USA

^bDepartment of Radiology, The Children's Mercy Hospital, Kansas City, MO 64108, USA

Received 9 July 2008; revised 16 August 2008; accepted 18 August 2008



Outcomes of Pediatric Vascular Trauma in the Endovascular Era

Lidie Lajoie¹, Stefan C. Kenel-Pierre¹, Sue Hahn¹, Robert Schulze², Andrea Hendrzak¹, Mark Song¹. ¹Surgery, SUNY Downstate Medical Center, Brooklyn, NY; ²Kings County Hospital Center, Brooklyn, NY

- ✓ 60 patients
- ✓ 80 traumatismes vasculaire.
- ✓ 49 chirurgie a ciel ouvert
- ✓ 13 traitement endovasculaire.

Conclusion

- Prévention.
- Diagnostic et prise en charge précoce.
- Traitement endovasculaire faisable.
- Stent biodégradable.