

Iliopsoas haematoma our experience

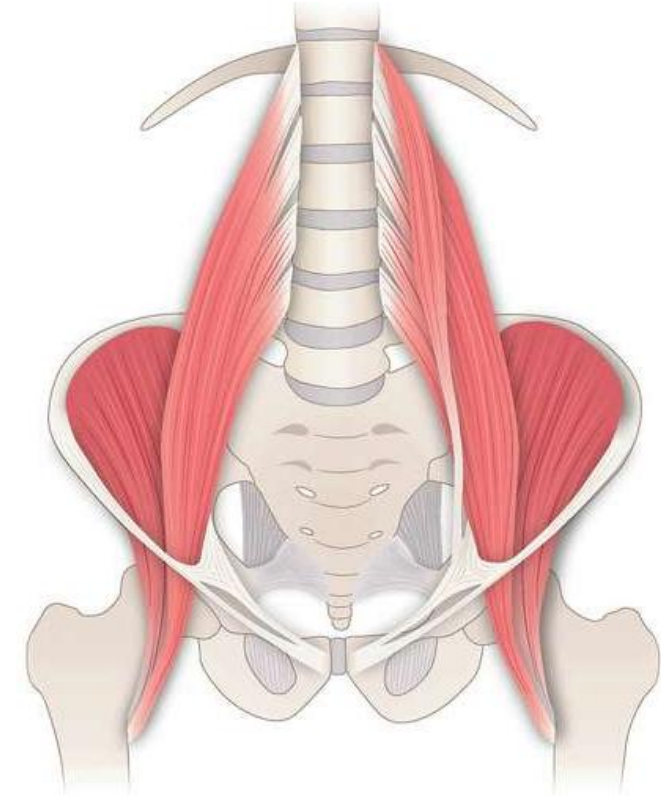
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M. iliopsoas

- origin
 - *m. psoas m.* – vert. T12–L5, proc. costarii L1–L5
 - *m. iliacus* – iliac fossa, iliac crest, linea arcuata
- Insertion
 - *Femoral lesser trochanter*
- Innervation
 - *Femoral nerve (L2-4), lumbar plexus (L1–L3)*
- Function
 - *Flexion of the thigh, external rotation, auxiliary adductor*
- Blood supply
 - *External iliac a, femoral a, obturator a*



Iliopsoas haematoma (IPH)

- Clinical presentation
 - **Pain**, haematoma, muscle dysfunction, nerve palsy (femoral)
- Predisposing and contributing factors
 - **Minor trauma**, increased intra-abdominal pressure, iatrogenic causes
- Risk factors
 - **Anticoag. meds, coagulopathy**, haemophilia, age, diabetes, covid-19
- Diagnostic imaging
 - **CT, US, (X-ray, MRI, EMG)**
- Lab tests
 - Haemoglobin, platelets, INR, APTT, aXa

Iliopsoas haematoma (IPH)

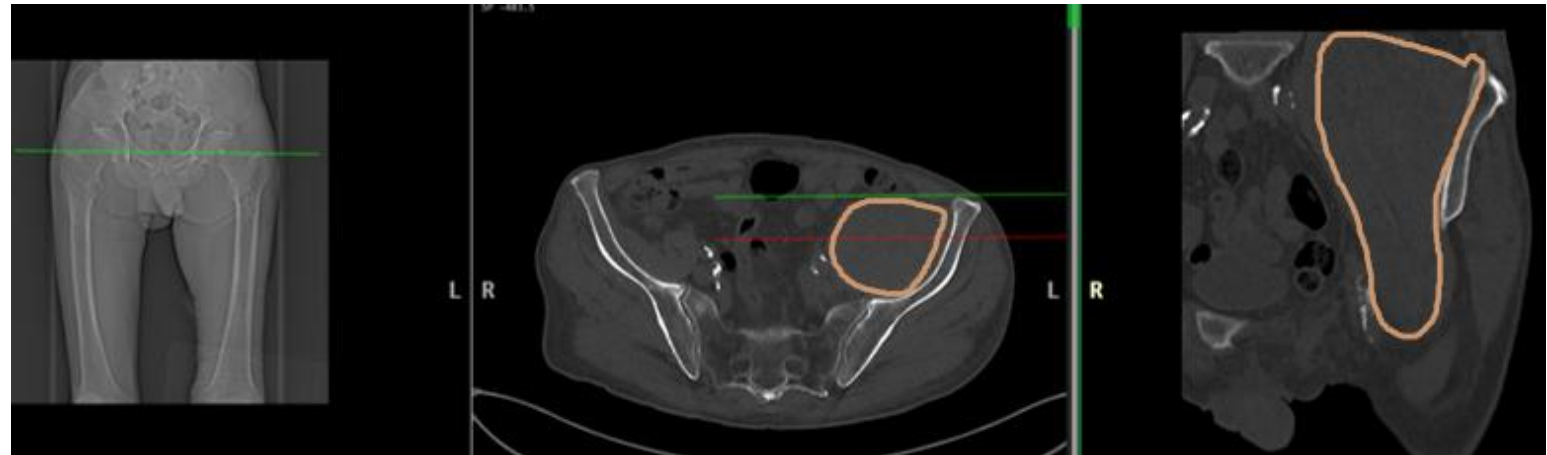
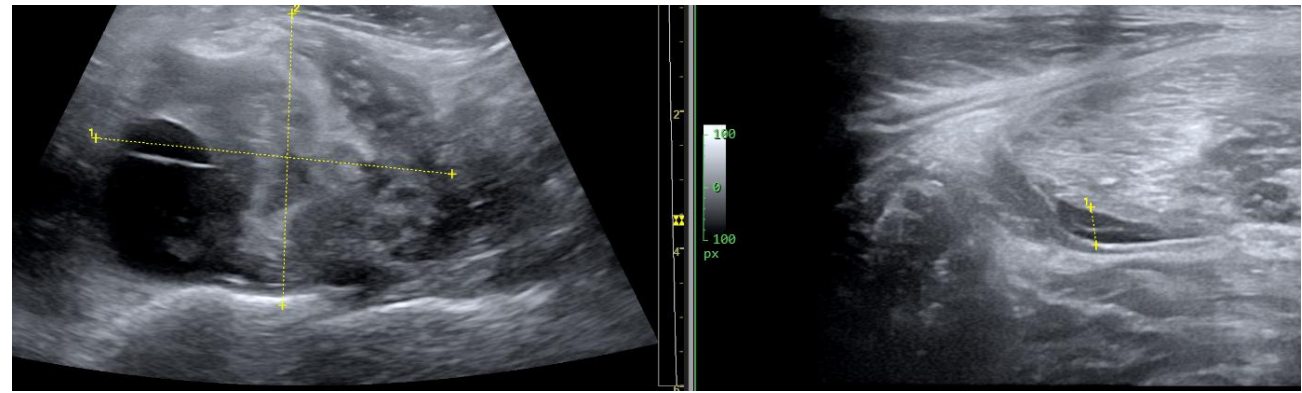
- Treatment
 - Incision + drainage – surgery
 - Percutaneous drainage
 - Conservative – blood transfusion, fresh frozen plasma, Vitamin K, Tranexamic acid
 - Angiography + embolism
- Complications: haemodynamic instability, infection (DM!)
- Mortality rate: 4-20%

Our Experience – cohort of patients in year 2022

	sex	age	BMI	anticoag med.	cause	treatment	Hosp. days	outcome
1	F	89	21	+	Minor t.	Conserv.	9	discharged
2	M	31	28	(coagulopathy)	Indetermin.	Surgery	9	discharged
3	F	73	24	0	Minor t.	Surgery	13	discharged
4	M	80	20	+	Minor t.	Surgery	15	discharged
5	F	76	22	+	Indetermin.	Surgery (2x)	72	discharged

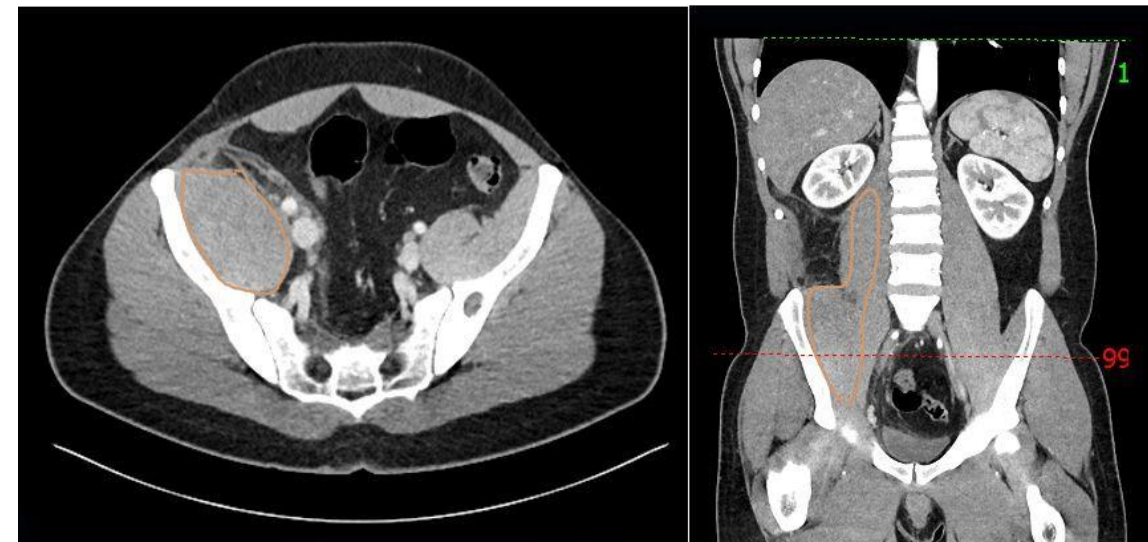
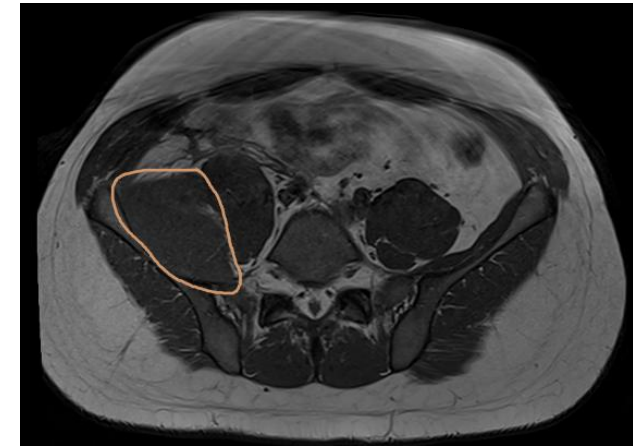
Male, age 80

- stepped down a larger step and suddenly groin pain appeared (minor trauma)
- Hip movement 0-90, no rotations, groin pain, groin ekchymosis
- RF: At. Fibrilation (Apixaban(Eliquis) 5mg 1-0-1)
- Treatment:
 - Surgery – Evacuation of hematoma
- Hospital days: 15



Male, age 31

- Cause: Indeterminate
- Palpable groin resistance, hip movement 15-90, no rotations, groin pain, Hypoesthesia of the thigh
- RF: known coagulopathy
- Treatment:
 - Monitoring + Tranexamic acid
 - Surgery – Evacuation of hematoma
- Hospital days: 9



Female, age 73

- Cause: had a massage (minor trauma) intramuscular injection (iatrogenic)
- Palpable groin resistance, hip movement 10-90, rotations 0-10, groin pain, Hypoesthesia of the thigh
- RF: not known
- Treatment:
 - Surgery – Evacuation of hematoma
- Hospital days: 13



Discussion:

- According to literature:
 - Real incidence is still unknown, rare condition
 - Most often, it is due to the combination of **minor trauma** and **anticoagulants**, in many cases the cause is still unclear
 - Approaches to the problem vary, and the recommended course of action has not yet been established
 - Mortality rate: 4-20%

Conclusion:

- In 2022, we had an epidemic of IPH at our clinic
 - We can't say for sure why this happened
 - We have taken a proactive approach that we can recommend
 - Ilioinguinal (Letournel) approach – iliac window
 - All our patients were discharged without further complications

Literature:

1. *Shangxiang Liu, Chengqing Mei, Hui Zou*: Iliopsoas hematoma associated with low-molecular-weight heparin use: A case report, 2020 (China)
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3. *William H. Arata, Kunal Aggarwal*: Iliopsoas Hematoma Progression to Abscess in the Setting of Diabetic Ketoacidosis, 2023 (USA)
4. *Babikir Kheiri, Mohammed Al Salihi*: Warfarin-induced spontaneous iliopsoas hematoma — An unusual complication, 2018 (USA)
5. *Silvia Otero-Rodriguez, Cristina Guillen*: Severe Spontaneous Hematomas in Patients Hospitalized with COVID-19, 2023 (Spain)
6. *Fumihiko Takahashi*: Spontaneous iliopsoas hematoma with hip pain and ecchymosis of the thigh, 2019, (Japan)
7. *Jae Hoon Kim, Seung Don Yoo*: Iliopsoas hematoma presenting with sudden knee extensor weakness, 2020 (Korea)
8. *Mohamed wajih oueslati, Khaled Kamoun*: Traumatic iliac muscle hematoma: A rare etiology of quadriceps palsy, 2023, (Tunisia)
9. *Azam Basheer, Rajan Jain*: Bilateral iliopsoas hematoma, 2013 (USA)
10. *Palatucci V, Lombardi G*: Spontaneous muscle haematomas: management of 10 cases, 2014 (Italy)

- Thank you for your attention