Clinical summary

• Patient with newly diagnosed low grade lymphoma on biopsy

• Discordant symptoms of rapid development of adenopathy

• Patient referred for FDG PET/CT to assess metabolic activity and baseline for possible use for response evaluation after therapy
Diagnostic CT findings

Confluent adenopathy in the abdomen and pelvis

http://humanhealth.iaea.org
FDG PET findings

FDG avid adenopathy has both a low and high FDG uptake. Visually, the FDG uptake is similar in (A), whilst the differing uptake is seen in (B). This illustrates the importance of correct windowing.

SUV 10

SUV 35

http://humanhealth.iaea.org
PET/CT findings

FDG PET

Non-contrast CT

Fused FDG PET/CT

Contrast CT

http://humanhealth.iaea.org
• Repeat FNA – low grade B cell lymphoma composed of small cells

• Core biopsy – Diffuse Large B Cell Lymphoma with associated low grade B cell lymphoma
Re-staging after 6 weeks of therapy

http://humanhealth.iaea.org
Teaching points

- FDG PET can distinguish indolent from aggressive lymphoma.
- FDG PET can direct biopsies to confirm diagnosis which can determine the type of therapy.
- FDG PET can monitor response to therapy in aggressive lymphoma.
Discussion

- Low grade or indolent lymphomas are slow growing, manifesting as adenopathy.
- Incurable, therapy can be started when symptoms develop.
- Low grade lymphomas have lower FDG uptake than aggressive lymphoma.
- PET can be helpful if there is a discrepancy between the biopsy and clinical behavior.
FDG PET can distinguish indolent from aggressive NHL

- 97 patients with NHL
- Indolent (SUV, 7.0 +/- 3.1)
- Aggressive (SUV 19.6 +/- 9.3)
- SUV > 10 excluded indolent lymphoma with a specificity of 81%
- PET information may be helpful if there is discordance between biopsy and clinical behaviour