

CT in CF - Clinicians

Which cystic fibrosis centre do you work at?

Q1 Do you think CT is a useful tool in monitoring disease progression in children with cystic fibrosis?

- Yes
- No

Q1 Comments

Q2 Is it your impression that CT scan results frequently alter the management in children with cystic fibrosis?

- Yes
- No

Q2 Comments

Q3a In a clinically well child, would you undertake a baseline CT scan?

- Yes
- No

Q3a Comments

Answer If In a clinically well child, would you undertake a baseline CT scan at some point?
Yes Is Selected

Q3b At what age would you request this scan?

_____ Age (years)

Answer If In a clinically well child, would you undertake a baseline CT scan at some point?
Yes Is Selected

Q4a Would you repeat the CT scan after a period of time, even if the child remains well?

- Yes
- No

Answer If If the child remains well, would you undertake a repeat CT scan at some point?
Yes Is Selected

Q4b How many years after the baseline CT scan would you do this?

_____ Years

Q5 Are you aware of the radiation dose that is associated with a CT scan at your centre?

- Yes
- No

Q5 Comments

Q6 Are the potential harmful effects of CT scans discussed with the children and parents?

- Never
- Rarely
- Sometimes
- Often
- Always

Q6 com If so, what information do you provide?

Intro 2 The final 5 questions concern the use of CT scans in different clinical scenarios.

Sc1 A 10 year old boy has isolated Mycobacterium abscessus on 3 consecutive sputum samples. His FEV1 has also reduced from 95% to 80% predicted. Would you perform a CT scan to aid in the diagnosis of non-tuberculous mycobacterium disease?

- Yes
- No

Sc1 Comments

Sc2 A 10 year old girl with CF has deteriorated over a 6 month period. She has developed a chronic wet cough and her FEV1 has reduced from 100% predicted to 80%. Cough swabs have only isolated mixed flora and a chest x-ray did not show any new changes. A course of intravenous antibiotics had little effect and so a flexible bronchoscopy was requested. Would you order a CT scan for this girl?

- No - not at any point
- Yes - request at the same time as bronchoscopy
- Yes - but only if the bronchoscopy failed to identify a cause for the deterioration

Sc2 Comments

Sc3a A 10 year old boy with CF is noted to have increased bronchovascular markings and new cystic changes on his annual review chest x-ray. He denies any new symptoms and his spirometry is stable (FEV1 85%). Would you perform a CT scan in this boy?

- Yes
- No

Answer If 'A 10 year old boy with CF is noted to have increased bronchovascular markings and new cystic cha...' Yes Is Selected

Sc3b Is there a minimum time since his last CT scan that you would want to see elapsed before you repeat the CT scan?

- Yes
- No

Answer If 'Is there a minimum time since his last CT scan that you would want to see elapsed before you repeat the CT scan?' Yes Is Selected

Sc3c What is this minimum time in months?

Sc3 Comments

Sc4 A 10 year old girl with CF has deteriorated over a 6 month period. She has increased cough and her FEV1 has fallen from 85% to 70% predicted. There is limited improvement with course of intravenous antibiotics. Her total IgE is 1500 and she has positive specific IgE and precipitins to *Aspergillus fumigatus*. There are no new changes on her CXR. Would you routinely perform a CT scan to aid the diagnosis of ABPA?

- Yes
- No

Sc4 Comments

Sc5 A 10 year old girl with CF develops a left lower lobe collapse during an infective exacerbation. Despite admission for 2 weeks intravenous antibiotics and intensive physiotherapy, the lobe does not re-inflate. She is therefore booked for a flexible bronchoscopy. Would you undertake a CT scan in this girl?

- No - not at any point
- Yes - as soon as the chest x-ray confirmed the left lower lobe collapse
- Yes - but only after two weeks of antibiotics and physiotherapy have failed to re-inflate the lobe
- Yes - but only if bronchoscopy is unsuccessful at re-inflating the lobe

Sc5 Comments

Final Do you have any further comments regarding the use of CT scans in children with cystic fibrosis?