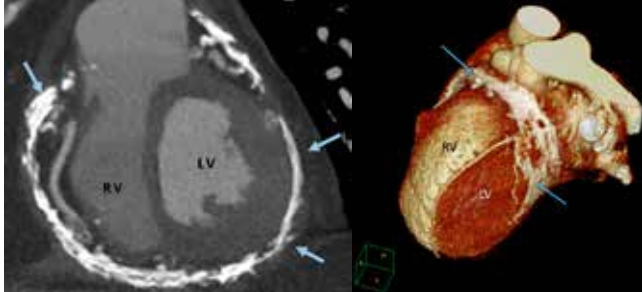


# Curiositas

## POSTGRADUATE QUIZ

A 37 year old gentleman with recurrent chest pain and dyspnoea on exertion was referred for cardiac CT examination after an equivocal exercise stress test.

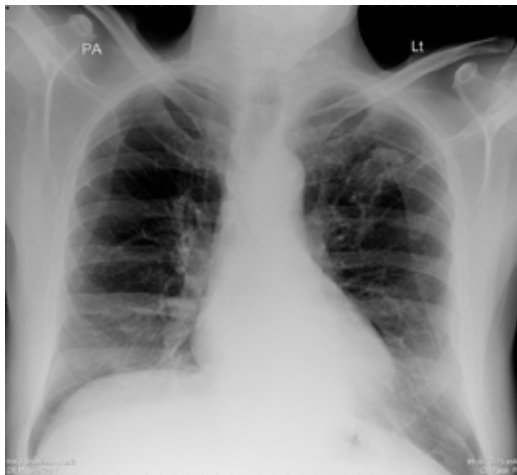


1. What abnormality (highlighted by arrows) is visualised on these CT images?
2. What is the diagnosis?
3. What is the somewhat appropriate German descriptive name for this condition?

*Dr Claire McCune, Dr Jonny Hogg and Dr John Purvis (Cardiac Unit, Altnagelvin Hospital, Western HST, Londonderry). Corresponding author: Dr John Purvis (Consultant Cardiologist, John.purvis@btinternet.com)*

## MEDICAL STUDENT QUIZ

What festive chest x-ray sign is evident and what is the typical causative agent?



*Dr Ian Bickle, Consultant Radiologist, Raja Isteri Penigran Anak Saleha Hospital, Bandar seri Begawan, Brunei Darussalam.*

## GENERAL PRACTICE QUIZ

A three month post-partum 30 year old presented to her GP with a 'painful wrist'. During her pregnancy she had a tingling sensation in her thumb, index, middle and part of her ring finger – which has now resolved. Presently, she has pain over the base of her right thumb and the distal forearm. The pain is exacerbated when she places her hand in the position shown.



1. What is this 'manoeuvre' better known as?
2. What condition does it test for?
3. What other condition is described in this case? What is the significance of these conditions in relation to pregnancy?

*Glenn Ritchie (Medical Student, Queen's University Belfast) and Dr Gerry Gormley, (Senior Academic General Practitioner, Queen's University Belfast).*

## HISTORICAL QUIZ



1. Who is the famous Ulster physician depicted in this statue?
2. Where would you find this memorial?
3. What is the 'device' featured beside him?

*Michael Corr (Medical Student, Queen's University Belfast) and Dr Paul Hamilton (Specialty Registrar, Chemical Pathology, Belfast Health and Social Care Trust)*

## AND FINALLY.....

Curiositas is pleased to announce the appointment of two medical student sub-editors: Michael Corr and Glenn Ritchie. Michael and Glenn are currently fourth medical students at Queen's University Belfast. Curiositas looks forward to working with them.



**ANSWERS** See overleaf

### CONSIDER CONTRIBUTING TO CURIOSITAS?

Please refer to 'Curiositas: Guidelines for contributors' <http://www.ums.ac.uk/curiositas.html> and email [curiositas@ums.ac.uk](mailto:curiositas@ums.ac.uk) with your ideas and submissions.

## Curiositas: Answers

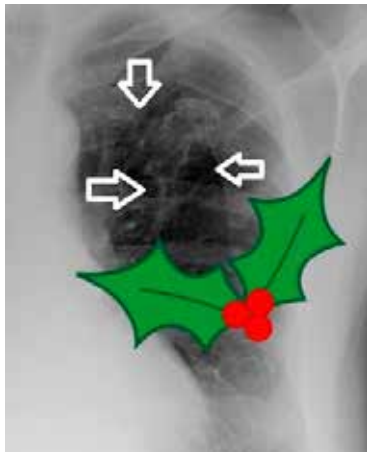
### POSTGRADUATE QUIZ

1. **What abnormality (highlighted by arrows) is seen on the CT images?**  
There is extensive calcification of the pericardium. Calcification tends to be most marked within the atrioventricular groove (between atria and ventricles) but may extend to cover the remainder of the heart. A thin shell of calcification surrounding the heart on chest X-ray is a useful clue – appearances are much more dramatic on CT imaging.
2. **What is the diagnosis?** Chronic constrictive pericarditis. The thickened rigid pericardium prevents adequate filling of the heart producing symptoms of dyspnoea and fatigue. Compression of the right ventricle leads to back pressure affecting the superior vena cava (causing a raised jugular venous pressure) and inferior vena cava (causing hepatic congestion). The diagnosis is notoriously difficult to make on clinical grounds alone.
3. **What is the somewhat appropriate German descriptive name for this condition and what is the treatment?** Panzerherz (armoured heart). The English literature refers to it as a porcelain heart. Diuretics may give symptomatic relief for a while, but the definitive treatment is surgical stripping of the thickened pericardium. This may be hazardous as the thickened material can become adherent to and penetrate into the underlying myocardium. Sometimes the surgeon can only break the thickened mass up into several semi-mobile plates resembling medieval plate armour.

Dr Claire McCune, Dr Jonny Hogg and Dr John Purvis (Cardiac Unit, Altnagelvin Hospital, Western HST, Londonderry). Corresponding author: Dr John Purvis (Consultant Cardiologist, [John.purvis@btinternet.com](mailto:John.purvis@btinternet.com))

### RADIOLOGICAL QUIZ

The 'holly leaf' sign refers to the characteristic appearance of a calcified pleural plaque on a chest X-ray. The shape and irregular, coarse, nodular outline gives rise to this description relating to the leaves of a holly tree – a tree most associated with Christmas. It accounts for the appearance of only a small proportion of all pleural plaques. Pleural plaques typically occur in those exposed to asbestos, such as individuals working in the ship-building and construction industries.



Dr Ian Bickle, Consultant Radiologist, Raja Isteri Penigran Anak Saleha Hospital, Bandar seri Begawan, Brunei Darussalam.

### GENERAL PRACTICE QUIZ

1. What is this 'manoeuvre' better known as? Finklestein's test. Pain is felt at base of the thumb along the tendons of the extensor pollicis brevis and abductor pollicis longus muscles.
2. What condition does it test for? De Quervain's Tenosynovitis. Inflammation and thickening of the sheath surrounding the aforementioned tendons.

3. What other condition is described in this case? What is the significance of these conditions in relation to pregnancy?

Pregnant women are prone to developing carpal tunnel syndrome during pregnancy, but after pregnancy they can be prone to developing De Quervain's from holding their new born - 'Mummy's thumb'.



Glenn Ritchie (Medical Student, Queen's University Belfast) and Dr Gerry Gormley, (Senior Academic General Practitioner, Queen's University Belfast). (Dr Jonathan Morrow kindly provided the images for this question)

### HISTORICAL QUIZ

1. Professor Frank Pantridge was born in Hillsborough, County Down in 1916. He graduated in medicine from Queen's University Belfast in 1939. He served in the Medical Corps of the British Army during World War II, and during the Fall of Singapore was taken as a prisoner of war by the Japanese. He was later awarded the Military Cross for his service. In 1950, he became a lecturer at the pathology department of Queen's University Belfast. He then undertook a scholarship at the University of Michigan department of cardiology, before returning again to Belfast when he was appointed as a professor at Queen's University, and a consultant cardiologist at the Royal Victoria Hospital. Working with his colleague Dr John Geddes, he introduced cardiopulmonary resuscitation to Belfast in 1957. However, Pantridge noted that most patients with ventricular fibrillation need an intervention before reaching hospital. By 1965, Pantridge's first portable defibrillator (weighing 70 kg) was being fitted into a Belfast ambulance. Three years later, the design had been refined so that the device weighed a mere 3 kg. In a landmark paper in the Lancet in 1967, he presented the Belfast Plan which showed improved survival through delivering emergency cardiac care in the community. It was this paper which spread his message across the world and earned him the title 'The Father of Emergency of Medicine'.
2. Outside the offices of Lisburn Borough Council, Lagan Valley Island Centre.
3. A portable defibrillator.



For further information on the life and work of Professor Frank Pantridge: *Ulster Med J* 2010; 79(Suppl 1): 1-2. *Curiositas* would like to thank Lisburn City Council who kindly gave permission for use of these images and providing supplementary information