Fine-needle aspiration guided by endoscopic ultrasonography (EUS FNA) in pancreatic masses

Submission date	Recruitment status	Prospectively registered
03/04/2014	No longer recruiting	<pre>Protocol</pre>
Registration date	Overall study status	Statistical analysis plan
29/04/2014	Completed	Results
Last Edited	Condition category	Individual participant data
29/04/2014	Cancer	Record updated in last year

Plain English summary of protocol

Background and study aims

Fine-needle aspiration guided by endoscopic ultrasonography (EUS-FNA) is a procedure to take a sample of tissue for examination under a microscope. A thin, tube-like instrument called an endoscope with an ultrasound probe and a biopsy needle at the end is inserted through the mouth into the oesophagus (gullet). The ultrasound probe is used to bounce sound waves off internal organs and tissues to make a picture on a monitor, which helps the doctor see where to place the biopsy needle to take a sample. EUS-FNA has changed the way solid pancreatic masses are treated. The aim of this study was to compare the diagnostic accuracy of 25-gauge and a 22-gauge needles in patients with pancreatic solid masses.

Who can participate?

Adults identified to have a pancreatic mass can take part in this study.

What does the study involve?

All patients underwent EUS-FNA using both needles (22-gauge and 25-gauge). The order in which the needles were used were randomly allocated. Half of them had 22-gauge used first and the rest had 25-gauge used first. Tissue samples were analysed for accuracy of diagnosis.

What are the possible benefits and risks of participating?

It is possible that the thinner 25-gauge needle could provide equal or better performance in sampling the pancreas than the 22-gauge needle. It can possibly decrease the risk of FNA-induced bleeding and contamination of the tissue sample.

Where is the study run from? Geneva University Hospital (Switzerland).

When is the study starting and how long is it expected to run for? The study started in December 2010 and ran for two years.

Who is funding the study? Geneva University Hospital (Switzerland) and Cook (Ireland). Who is the main contact? Prof. Jean Louis Frossard jean-louis.frossard@hcuge.ch

Contact information

Type(s)

Scientific

Contact name

Prof Jean Louis Frossard

Contact details

Service of Gastroenterology and Hepatology Geneva University Hospital R G Perret Gentil 14 Geneve Switzerland 1211

Additional identifiers

Protocol serial number

Protocol No 09-244 accepted on 27.01.2010

Study information

Scientific Title

EUS-guided fine needle aspiration (FNA) in pancreatic masses: a prospective randomized study comparing the yield of 22-gauge and 25-gauge needle in the same patient

Acronym

EUS FNA

Study objectives

It remains unclear whether the 22- and 25-gauge needles have equal diagnostic yields in EUS-FNA of pancreatic masses.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cantonal Commission of Research Ethics [Commission cantonale d'éthique de la recherche (CCER)], 27/01/2010, Ref. 09-244

Study design

Prospective randomized study

Primary study design

Interventional

Study type(s)

Diagnostic

Health condition(s) or problem(s) studied

Pancreas mass

Interventions

EUS FNA

The randomization sequence of the needle size was created with a 1:1 allocation using blocks of four without stratification. The allocation was achieved in the operating room by physicians blinded for the allocation sequence, using sequentially numbered, sealed and opaque envelopes.

All patients undergo EUS-FNA with a 22-gauge needle and a 25-gauge needle. The order of the needles used is randomised.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Tissue sample was examined under the microscope. All slides were evaluated for the amount of blood found on the smears, digestive contamination, pancreatic cellularity and final diagnosis. The final diagnosis was based on cytology report, surgical pathology if available, repeated radiological imaging and clinical follow-up.

Key secondary outcome(s))

FNA complications

Completion date

31/12/2012

Eligibility

Key inclusion criteria

Only adults over 18 years were eligible for the study. They all presented to our service with a solid pancreatic mass identified by at least two dissimilar imaging modalities (ultrasound, CT scan, MRI).

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

- 1. Sepsis
- 2. Acute pancreatitis defined as abdominal pain associated with increased serum lipase > 3 the normal value)
- 3. Anticoagulant therapy
- 4. Antiaggregant therapy other than aspirin
- 5. Previous history of modified anatomy interfering with endoscopic assessment
- 6. Incapacity to give informed consent

Date of first enrolment

01/12/2010

Date of final enrolment

31/12/2012

Locations

Countries of recruitment

Switzerland

Study participating centre Service of Gastroenterology and Hepatology

Geneve Switzerland 1211

Sponsor information

Organisation

Geneva University Hospital (Switzerland)

ROR

https://ror.org/01m1pv723

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Geneva University Hospital (Switzerland)

Funder Name

Cook (Ireland) - provided needles

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet
Participant information sheet
11/11/2025 No Yes