GONDOLA: Gonorrhoea detection using laboratory assessment

Submission date 03/02/2020	Recruitment status No longer recruiting	 Prospectively registered [X] Protocol
Registration date 05/03/2020	Overall study status Completed	 Statistical analysis plan Results
Last Edited 05/03/2020	Condition category Infections and Infestations	 Individual participant data Record updated in last year

Plain English summary of protocol

Background and study aims

Gonorrhoea is a sexually transmitted infection (STI) caused by bacteria called Neisseria gonorrhoeae or gonococcus.

The incidence of gonorrhoea is potentially underestimated because it is not always detected. Undetected or inadequately treated gonorrhoea can cause serious reproductive health consequences and poses a threat to public health due to the emergence of drug-resistant strains; timely and accurate diagnosis is therefore essential. Despite high specificity tests available, N. gonorrhoeae bacteria are technically difficult to preserve and recover from clinical specimens. Any delay in processing, transport and incubation of direct culture plates can significantly reduce the sensitivity of the test, resulting in false negative results and nontreatment. Novel swab transport systems have become increasingly important due their low cost, ease of use and the ability to maintain viability for aerobic, anaerobic and fastidious microorganisms – such as N. gonorrhoeae – over extended times. This may have benefits in clinic settings across the UK, particularly in rural settings where transport times to laboratories may be longer. This study aims to assess the performance of a novel swab incubation and transport system – BioMed's InTray™ GC – compared to the current method of plating onto a solid growth medium to prepare, transport and detect Neisseria gonorrhoeae in sexual health clinics. Further the objective is to assess the potential cost-effectiveness and benefits in terms of storage, transport and incubation time.

Who can participate?

Patients presenting to sexual health clinic with symptom(s) of Neisseria gonorrhoeae infection, presence of urethral or vaginal discharge and/or dysuria, or patients with recent medical history and risk factors that in the opinion of the treating clinician warrants investigation for N. gonorrhoeae infection.

What does the study involve?

Participants will be asked to provide a swab sample (vaginal/cervix/rectal swabs for women and urethral/rectal swabs for men) as per normal practice to test for N Gonorrhoea infection.

What are the possible benefits and risks of participating?

Benefits: There is no guaranteed anticipated clinical benefit from taking part in this study.

However, if the novel Biomed InTray shows significant benefits over the current practice, meaning higher detection rates of gonorrhoea, then the clinical team can use these results for the management of patients. This means that patients may be treated more optimally if the new sample transport kit that is being tested outperforms the current standard transport method. As a result, this study may then also lead to higher quality of gonorrhoea sampling and testing in the future.

Risks: There is no significant increased personal safety risk anticipated for patients who take part in this study. To obtain sufficient material, patients may be swabbed a second time (using a same type of swab they would normally be swabbed with). This may feel a bit uncomfortable for a very brief period of a few seconds.

Where is the study run from? Cumbria Partnership NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for? March 2019 to August 2020

Who is funding the study? Biomed Diagnostics Inc (USA)

Who is the main contact? Leon Jonker, leon.jonker@nihr.ac.uk

Contact information

Type(s) Scientific

Contact name Dr Leon Jonker

Contact details North Cumbria Integrated Care NHS Foundation Trust R&D Dept, Carleton Clinic Carlisle United Kingdom CA1 3SX +44 (0)1228 608926 leon.jonker@nihr.ac.uk

Additional identifiers

EudraCT/CTIS number Nil known

IRAS number 261500

ClinicalTrials.gov number Nil known CPMS 41639, IRAS 261500

Study information

Scientific Title

A single-centre, prospective evaluative study to investigate the performance of the Bio Med InTray® GC (a sample collection, transport and culture in-vitro device), compared to current standard methods, to microbiologically detect Neisseria gonorrhoeae

Acronym

GONDOLA

Study objectives

To determine the microbiological detection rates of gonorrhoea using InTray[™] GC liquid transport medium compared to current practice (agar plating) in Cumbrian sexual health clinics.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 25/04/2019, South East Scotland Research Ethics Committee 01 (Waverley Gate, 2-4 Waterloo Place, Edinburgh, EH1 3EG, UK; +44 (0)131 465 5473; Sandra.Wyllie@nhslothian.scot. nhs.uk), ref: 19/SS/0050

Study design Non-randomized interventional study

Primary study design Interventional

Secondary study design Non randomised study

Study setting(s) Hospital

Study type(s) Diagnostic

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Gonococcal infection

Interventions

Participants will be asked to provide a swab sample (vaginal/cervix/rectal swabs for women and urethral/rectal swabs for men) as per normal practice to test for N gonorrhoeae infection. The

samples will be processed using the current standard method (which is to use so-called solid agar incubation plates).

As part of the study, an additional swab sample - from the same location and using the same type of swab - may be taken if the initial swab is insufficient.

The swab(s) are used to inoculate a standard agar plate and a Biomed InTray[™] plate, and these will be processed after transport to the microbiology laboratory for diagnostic testing. Thereafter the patient will be cared for in the same matter as they normally would. The results of the tests will be communicated as per normal practice by the clinical team. One difference is that the results of both the agar plating and Biomed InTray[™] system may be used to manage patients, subject to agreement from the microbiologist and sexual health consultant. This means that if the Biomed InTray system performs better than agar plating, more gonorrhoea cases may be detected and treated accordingly.

There are no follow-up visits when patients take part in the study - it is just a single visit (ie the clinic visit that patients already attend).

Intervention Type Procedure/Surgery

Primary outcome measure

Detection rates of gonococcal infection assessed by microbiology laboratory diagnostic testing

Secondary outcome measures None

Overall study start date 19/03/2019

Completion date

31/08/2020

Eligibility

Key inclusion criteria

 Presenting to sexual health clinic with symptom(s) of Neisseria gonorrhoeae infection, presence of urethral or vaginal discharge and/or dysuria OR
 Recent medical history and risk factors that in the opinion of the treating clinician warrants investigation for N. gonorrhoeae infection

Participant type(s) Patient

Age group Adult

Sex Both Target number of participants

Planned Sample Size: 60; UK Sample Size: 60

Key exclusion criteria

 Under the age of 18 years
 Unable to fully understand the consent process and provide informed consent due to either language barriers or mental capacity

Date of first enrolment

29/04/2019

Date of final enrolment 31/08/2020

Locations

Countries of recruitment England

United Kingdom

Study participating centre Carleton Clinic Cumbria Partnership NHS Foundation Trust Cumwhinton Road Carlisle United Kingdom CA1 3SX

Sponsor information

Organisation North Cumbria University Hospitals NHS Trust

Sponsor details (now known as North Cumbria Integrated Care NHS Foundation Trust) Voreda House Portland Place Penrith Carlisle England United Kingdom CA11 7BF +44 (0)1228 608926 dave.dagnan@ncic.nhs.uk **Sponsor type** Hospital/treatment centre

Funder(s)

Funder type Industry

Funder Name Biomed Diagnostics Inc

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal.

Intention to publish date

31/03/2021

Individual participant data (IPD) sharing plan

All data generated or analysed during this study will be included in the subsequent results publication

IPD sharing plan summary Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Protocol file</u>	version v4	06/12/2019	05/03/2020	No	No
HRA research summary			28/06/2023	Νο	No