

Cases

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Part 2 Module 2 Paper 3

6 cases
approx.
9 mins each

https://www.rcpath.org/trainees/examinations/examinations-by-specialty/clinical-biochemistry.html

FRCPath Clinical Biochemistry Examination Guidance for Candidates

Speaker:
Dr Kevin Deans, Clinical Biochemistry Panel Chair, RCPATH

FRCPath Clinical Biochemistry Examination - Guidance for Candidates


Part 1


- > Clinical Biochemistry Part 1 Examination


Part 2


- ✓ Clinical Biochemistry Part 2 Examination
 - > Module 1 - Practical Skills Module
 - ✓ Module 2 - Clinical, scientific and management skills module

Paper 3 is a 3 hour written paper in which candidates are required to interpret clinical cases and critically appraise journal articles. In the clinical cases section candidates are given six questions comprising a brief history and laboratory results and are asked to describe and interpret them. In the journal article evaluation section candidates are provided with 2 journal articles, on which they are asked to answer questions that test their critical reading and appraisal skills and their understanding of experimental methods and statistical techniques.

 **Sample Papers FRCPath Clinical Biochemistry Part 2 Module 2 Paper 3**

 **Sample Paper FRCPath Clinical Biochemistry Part 2 Module 2 Oral**

 **Clinical Biochemistry Spring 2024 Part 2 Module 1 Practical Paper**
JANUARY 2025

 **Clinical Biochemistry Part 2 Module 2 Critical Appraisal**
JANUARY 2025

Tips

- FRCPath is an exit exam
- Where part 1 is effectively a knowledge test, part 2 tests skills i.e. 'doing' rather than 'knowing'
- Therefore the answers should be the answers to questions you may be asked e.g. 'what do these results mean?'
- Answer as if you were explaining to a 'clueless' clinician or student

Tips

- There are no negative marks (usually)
- If not sure, do not panic or skip the question
- There should not be too much reliance on previous answers so persevere and read the whole question
- You roughly need 50% of marks... so you can bomb one question and accumulate marks on others.

Tips

- Twenty marks per case (6 cases 20 marks each)
- Each question tells you the marks for each part
- If there are more marks in one part than another then assume you need to write a bit more in that answer than the other
- A sensible approach is rewarded so if 'imprecise' but vaguely right and/or a good/safe approach you may get points

Tips

- Scope is any case you may get asked about i.e.
- Patient centric
- Very 'clinical'
- Very 'labby' (results and more technical 'answer' to the lab users)
- Or a mix
- There is an expectation that all will see different case mixes so should be mixed between all 6 (so not all IMD in paediatrics!)

Fictional Examples (trickiest type)

- IMD presentation in neonate e.g. hyperammonaemia
- A) Give 5 IMD causes of this presentation (10 marks)
- B) Team think it is OTC deficiency, what will the urine show (4 marks)
- C) What are the general principles of management of hyperammonaemia (4 marks)
- D) How can they avoid spurious hyperammonaemia (2 marks)

Fictional Examples (clinical)

- The clinical presentation of a case (i.e. the ‘clinical details’ or introduction from a clinician on the phone)
- A) What are the differentials for X symptom (10 marks)
- B) What does Y clinical sign mean (4 marks)
- C) What clinical score is used to assess severity (2 marks)
- D) What tests would you recommend (4 marks)

Fictional Examples (laboratory report)

- Table of more 'untypical results' i.e. a multi-analyte specialist report
- A) What do the following results mean – a, b, c (3,5,7 marks)
- B) Why is the creatinine measured (2 marks)
- C) What pre-analytical factors can affect the results (3 marks)
- (remember to imagine your audience is a 'work experience student' i.e. if 7 marks explain everything... don't assume it is obvious and go 'high' etc..)

How to prepare

- No substitute for 'doing' i.e. duty biochemist, or sit next to the DB, A&G, letters, emails, ward rounds, MDT, etc
- Clinical prep i.e. the meaning of clinical signs and symptoms: if scientific background then go to clinic and ward rounds, look at clinical details and make sure you know what people are talking about
- Review send away reports, try to know something of most tests in repertoire, for medical background spend time in lab e.g. specialists sections and 'report' etc
- Practice using case resources

Case Resources

- Gifford Batstone mailing list- giffordbatstone@gmail.com – 2 weekly case and answer to previous. Also note >100 are in Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics online resources, and now shortened appearing in LabMed News (with Deacon and Diggle Challenges)
- Annals of Clin Biochem and Clinical Chemistry (back catalogue on ADLM website) have case reports and discussion



Date: 4 July 2022

Cases for thought – Biochemistry (opt-in)

The Association for Clinical Biochemistry & Laboratory Medicine's Education, Training and Workforce committee have arranged access for ACB members to a series of 97 Biochemistry Cases for Thought, developed by Dr. Gifford Batstone, Dr. Gary Weaving, Dr. Tamsyn Cromwell and Dr. Kate Shipman.

How to access the cases

These cases are hosted on a third-party platform (Tietz), but Dr Gifford Batstone has agreed to make them available to members, on an opt-in basis. To request your copies, send an email to Dr. Bastone containing your name, job title, and the email address you wish to receive the cases on, at giffordbatstone@gmail.com.

Dr Batstone will then email you with the cases as file attachments. Please be patient in waiting for a reply, as demand for the cases will likely be high.

Clinical Chemistry Trainee Council

Resources

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[Guideline](#)

- ☐ Audit (111)
- ☐ Briefing (2)
- ☐ Cases for thought (39)
- ☐ Cases for thought - specialist (6)
- ☐ Deacons Challenge (200)
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- ☐ News (87)
- ☐ Paper (2)
- ☐ Publication (3)
- ☐ Trade Union (10)

Resources

- NICE/SIGN guidance
- RCPATH Curricula and syllabi
- International and national guidelines, and education e.g. Endocrine Society, Renal Association, BIMDG, JBDS
- Journals e.g. reviews, diagnostic algorithms (JLPM)
- Trust guidelines e.g. 'hyponatraemia', 'TPN'
- Ask colleagues! (large stash already collected of useful papers and cases)
- EQA cases

Resources

- NICE/SIGN guidance
- RCPATH Curricula and **syllabi**

The aims of the STP

- Professional registration
- World class performance in clinical science
- The acquisition of an appropriate level of underpinning scientific knowledge
- Trainees will become competent in undertaking complex scientific and clinical roles
- Defining and choosing investigative and clinical options
- Making key judgements about complex facts and clinical situations within a quality assurance framework
- Trainees will work directly with patients and all will have a positive impact on patient care and outcomes
- Trainees will be involved, often in lead roles, in innovation and improvement, research and development

Inborn errors of metabolism	CiPs: 1, 2, 3, 4, 5, 8, 9, 10, 11	
<p>The curriculum:</p> <ul style="list-style-type: none"> • Describes the biochemical basis of inborn errors of metabolism • Describes and explains the use of specialised dietary and drug treatments in patients with inherited metabolic disease • Demonstrates awareness of the range of treatment options available for inherited metabolic disease (e.g. enzyme replacement therapy) and their potential problems • Describes the presentation and course of common IEMs, including phenylketonuria, galactosaemia, homocystinuria, branch-chain amino acid disorders, fatty acid oxidation disorders, lysosomal, metals, mitochondrial, glycogen storage disorders, mucopolysaccharide, lysosomal, acute and chronic porphyrias • Pre-natal diagnosis of the fetus • Analysis of amino acids, carnitine, nucleotides, enzyme defects, copolysaccharides, urea and DNA • The metabolic basis, diagnosis and management of porphyria 	<p>Trainees will be able to:</p> <ul style="list-style-type: none"> • Demonstrate emergency management of common and important metabolic presentations, including metabolic acidosis, hypoglycaemia, hyperammonaemia, acute porphyrias • Show choice and interpretation of appropriate investigations • Demonstrate development of management plans with patients (and carers) for routine and emergency management • Demonstrate working effectively as part of a multidisciplinary team • Demonstrate counselling affected families and offer advice on prevention and treatment of exacerbations of the disease in question • Demonstrate liaison with specialist centres about the management of adults with inherited metabolic diseases and the organisation of specific treatments where appropriate • Recognise and sustain supportive relationships with patients with whom care will be prolonged and potentially life long • Demonstrate relevant evidenced-based information and, where appropriate, effective patient education with support of the multidisciplinary team • Demonstrate promoting and encouraging involvement of patients in appropriate support networks, both to receive support and to give support to others • Demonstrate setting long-term realistic goals 	<p>Trainees will:</p> <ul style="list-style-type: none"> • Demonstrate ability to relate theoretical knowledge and laboratory results to patient management by appropriate communication with clinical colleagues • Administer treatment to acutely ill patients and their families in a sympathetic way • Demonstrate involvement of patients and relatives in decision-making • Promote effective patient education and provision of information • Describe and explain the role of laboratory and non-laboratory investigations in the investigation of metabolic disorders • Demonstrate counselling techniques and advise affected families on prevention and treatment of disease exacerbations • Show support to patients in transition from paediatric to adult care • Demonstrate appreciation for the skills of other clinicians involved in delivering care

Resources

<https://www.bapen.org.uk/education/bapen-connect-clinical-nutrition-webinars/>



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Home > Education > BAPEN Connect: Clinical Nutrition Webinars

New Webinar Series: Advancing Clinical Nutrition Knowledge and Practice

BAPEN is excited to announce its latest webinar series designed for healthcare professionals, nutritional scientists, and anyone passionate about clinical nutrition. This series will feature expert-led discussions, cutting-edge research insights, and practical strategies to enhance nutritional care.

Aims

- To provide evidence-based education in clinical nutrition for healthcare professionals, nutritional scientists and healthcare students.
- To highlight the importance of good nutrition and the implications of malnutrition on patient outcomes in all clinical settings.

Each session will tackle key topics such as:

- Managing malnutrition in diverse populations.
- Innovations in artificial nutrition and hydration.
- Multidisciplinary approaches to improving patient outcomes.

The next webinar will be on **Screening & Assessment** at 12:30 – 13:30 BST on Wednesday 17th September.

REGISTER >

<https://myadlm.org/science-and-research/clinical-chemistry/clinical-case-studies>

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Clinical Case Studies

Need answers?
Start your search.

Each month, a clinical case description and a series of questions can be emailed to interested individuals 4-6 weeks in advance of publication. Links to the latest published Clinical Case Study and associated commentaries will also be included. Please contact CustServ@myadlm.org to be added to the distribution list.

Not secure | www.vademecum.org

Vademecum Metabolicum

Johannes Zschocke
Georg F. Hoffmann

Diagnosis and Treatment of Inborn Errors of Metabolism

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Summary

- Get involved i.e. give advice, discuss cases, review send-away reports
- Don't panic in exam
- You can't acquire points if you don't write anything