

ICM7077 - Emergency Care

This module is designed to give students the opportunity to review a wide range of acute medical pathophysiology-disease processes that underpin acute illness, and the skills to manage them.

View Online



A Universal FGM Flowchart and Reporting Tool.

https://rcem.ac.uk/wp-content/uploads/2021/10/QEC_Guideline_Information_Sharing_to_Reduce_Community_Violence_Sept2017.pdf.

Acute Coronary Syndromes (ACS) in Patients Presenting without Persistent ST-Segm.

<https://www.escardio.org/Guidelines/Clinical-Practice-Guidelines/Acute-Coronary-Syndrome-s-ACS-in-patients-presenting-without-persistent-ST-segm>.

Adroque, H. J., and N. E. Madias. 'The Challenge of Hyponatremia'. Journal of the American Society of Nephrology, vol. 23, no. 7, July 2012, pp. 1140–48, <https://doi.org/10.1681/ASN.2012020128>.

Ahmad, Faiz U., et al. 'A Randomized Clinical Trial of Hypothermia as a Preferred Second-Line Treatment for Elevated Intracranial Pressure After Traumatic Brain Injury'. Neurosurgery, vol. 78, no. 2, Feb. 2016, pp. N10–11, <https://doi.org/10.1227/NEU.0000000000001171>.

Andrews, Peter J. D., et al. 'Hypothermia for Intracranial Hypertension after Traumatic Brain Injury'. New England Journal of Medicine, vol. 373, no. 25, Dec. 2015, pp. 2403–12, <https://doi.org/10.1056/NEJMoa1507581>.

---. 'Hypothermia for Intracranial Hypertension after Traumatic Brain Injury'. New England Journal of Medicine, vol. 373, no. 25, Dec. 2015, pp. 2403–12, <https://doi.org/10.1056/NEJMoa1507581>.

Ayling, O. G. S., et al. 'Continuous Regional Anaesthesia Provides Effective Pain Management and Reduces Opioid Requirement Following Major Lower Limb Amputation'. European Journal of Vascular and Endovascular Surgery, vol. 48, no. 5, Nov. 2014, pp. 559–64, <https://doi.org/10.1016/j.ejvs.2014.07.002>.

Beard, David J., and Paul Wood. 'Pain in Complex Trauma: Lessons from Afghanistan'. BJA Education, vol. 15, no. 4, Aug. 2015, pp. 207–12, <https://doi.org/10.1093/bjaceaccp/mku035>.

Bernal, William, et al. 'Acute Liver Failure: A Curable Disease by 2024?' Journal of Hepatology, vol. 62, no. 1, Apr. 2015, pp. S112–20, <https://doi.org/10.1016/j.jhep.2014.12.016>.

Bernal, William, and Julia Wendon. 'Acute Liver Failure'. New England Journal of Medicine, vol. 369, no. 26, Dec. 2013, pp. 2525–34, <https://doi.org/10.1056/NEJMra1208937>.

Blaivas, Michael, et al. 'A Prospective Comparison of Procedural Sedation and Ultrasound-Guided Interscalene Nerve Block for Shoulder Reduction in the Emergency Department'. *Academic Emergency Medicine*, vol. 18, no. 9, Sept. 2011, pp. 922-27, <https://doi.org/10.1111/j.1553-2712.2011.01140.x>.

Brown, Sara A., et al. 'Current and Prospective Therapies for Acute Liver Failure'. *Disease-a-Month*, vol. 64, no. 12, Dec. 2018, pp. 493-522, <https://doi.org/10.1016/j.disamonth.2018.04.002>.

BTS/SIGN British Guideline on the Management of Asthma | British Thoracic Society | Better Lung Health for All.
<https://www.brit-thoracic.org.uk/standards-of-care/guidelines/btssign-british-guideline-on-the-management-of-asthma/>.

Carney, Nancy, et al. 'Guidelines for the Management of Severe Traumatic Brain Injury, Fourth Edition'. *Neurosurgery*, Sept. 2016, <https://doi.org/10.1227/NEU.0000000000001432>.

Carrie, Cédric, et al. 'Bundle of Care for Blunt Chest Trauma Patients Improves Analgesia but Increases Rates of Intensive Care Unit Admission: A Retrospective Case-Control Study'. *Anaesthesia Critical Care & Pain Medicine*, vol. 37, no. 3, June 2018, pp. 211-15, <https://doi.org/10.1016/j.accpm.2017.05.008>.

'Chapter 11. Use of Hyperosmolar Therapy in the Management of Severe Pediatric Traumatic Brain Injury'. *Pediatric Critical Care Medicine*, vol. 4, no. 3, <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&AN=00130478-200307001-00012&LSLINK=80&D=ovft>.

Chauny, Jean-Marc, et al. 'Risk of Delayed Intracranial Hemorrhage in Anticoagulated Patients with Mild Traumatic Brain Injury: Systematic Review and Meta-Analysis'. *The Journal of Emergency Medicine*, vol. 51, no. 5, Nov. 2016, pp. 519-28, <https://doi.org/10.1016/j.jemermed.2016.05.045>.

Chris Lipp. 'Analgesia in the Emergency Department: A GRADE-Based Evaluation of Research Evidence and Recommendations for Practice'. *Critical Care*, vol. 17, no. 2, <https://doi.org/10.1186/cc12521>.

Consent in Adults, Adolescents and Children in Emergency Departments.
https://rcem.ac.uk/wp-content/uploads/2021/10/Consent_Guidance_Revised_Jan2018.pdf.
Costantino, Giorgio, et al. 'Syncope Clinical Management in the Emergency Department: A Consensus from the First International Workshop on Syncope Risk Stratification in the Emergency Department'. *European Heart Journal*, vol. 37, no. 19, May 2016, pp. 1493-98, <https://doi.org/10.1093/eurheartj/ehv378>.

Cremers, A. J. H., et al. 'Effect of Antibiotic Streamlining on Patient Outcome in Pneumococcal Bacteraemia'. *Journal of Antimicrobial Chemotherapy*, vol. 69, no. 8, Aug. 2014, pp. 2258-64, <https://doi.org/10.1093/jac/dku109>.

Crompton, Ellie M., et al. 'Meta-Analysis of Therapeutic Hypothermia for Traumatic Brain Injury in Adult and Pediatric Patients*'. *Critical Care Medicine*, vol. 45, no. 4, Apr. 2017, pp. 575-83, <https://doi.org/10.1097/CCM.0000000000002205>.

D'Ascenzo, Fabrizio, et al. 'Incidence, Etiology and Predictors of Adverse Outcomes in 43,315 Patients Presenting to the Emergency Department with Syncope: An International Meta-Analysis'. *International Journal of Cardiology*, vol. 167, no. 1, July 2013, pp. 57–62, <https://doi.org/10.1016/j.ijcard.2011.11.083>.

Diabetic Foot Problems: Prevention and Management | Guidance and Guidelines | NICE. <https://www.nice.org.uk/guidance/ng19>.

Diabetic Ketoacidosis and Hyperglycaemic Hyperosmolar State - Acute and Chronic Complications of Diabetes - Diapedia, The Living Textbook of Diabetes. <https://www.diapedia.org/acute-and-chronic-complications-of-diabetes/71040851425/diabetic-ketoacidosis-and-hyperglycaemic-hyperosmolar-state>.

Ducros, A., and M. G. Boussier. 'Thunderclap Headache'. *BMJ*, vol. 346, no. jan08 15, Jan. 2013, pp. e8557–e8557, <https://doi.org/10.1136/bmj.e8557>.

ED Patients in Police Custody. https://rcem.ac.uk/wp-content/uploads/2021/10/ED_Patients_in_Police_Custody_revised_June2016.pdf.

Edlow, Jonathan A., and Louis R. Caplan. 'Avoiding Pitfalls in the Diagnosis of Subarachnoid Hemorrhage'. *New England Journal of Medicine*, vol. 342, no. 1, Jan. 2000, pp. 29–36, <https://doi.org/10.1056/NEJM200001063420106>.

'Efficacy of Postoperative Patient-Controlled and Continuous Infusion Epidural Analgesia versus Intravenous Patient-Controlled Analgesia with Opioids: A Meta-Analysis'. *Anesthesiology*, vol. 103, no. 5, pp. 1079–88, <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&AN=00000542-200511000-00023&LSLINK=80&D=ovft>.

Fernandes, Peter M., et al. 'Strokes: Mimics and Chameleons'. *Practical Neurology*, vol. 13, no. 1, Feb. 2013, pp. 21–28, <https://doi.org/10.1136/practneurol-2012-000465>.

Fever Control Management Is Preferable to Mild Therapeutic Hypothermia in Traumatic Brain Injury Patients with Abbreviated Injury Scale 3–4: A Multi-Center, Randomized Controlled Trial | *Journal of Neurotrauma*. <https://www.liebertpub.com/doi/abs/10.1089/neu.2015.4033>.

Fever in the Returning Traveller - Initial Assessment and Triage. https://www.bmj.com/content/bmj/suppl/2018/01/25/bmj.j5773.DC1/fever_diff_v38_web.pdf.

Fink, Doug, et al. 'Fever in the Returning Traveller'. *BMJ*, Jan. 2018, <https://doi.org/10.1136/bmj.j5773>.

Fleming, Ian, and Christian Egeler. 'Regional Anaesthesia for Trauma: An Update'. *Continuing Education in Anaesthesia Critical Care & Pain*, vol. 14, no. 3, June 2014, pp. 136–41, <https://doi.org/10.1093/bjaceaccp/mkt048>.

Franko, Jan, et al. 'Advanced Age and Preinjury Warfarin Anticoagulation Increase the Risk of Mortality After Head Trauma'. *The Journal of Trauma: Injury, Infection, and Critical Care*, vol. 61, no. 1, July 2006, pp. 107–10, <https://doi.org/10.1097/01.ta.0000224220.89528.fc>.

Fu, Peter, et al. 'Case Report of Serratus Plane Catheter for Pain Management in a Patient With Multiple Rib Fractures and an Inferior Scapular Fracture'. *A & A Case Reports*, vol. 8, no. 6, Mar. 2017, pp. 132–35, <https://doi.org/10.1213/XAA.0000000000000431>.

Galvagno, Samuel Michael, et al. 'Pain Management for Blunt Thoracic Trauma'. *Journal of Trauma and Acute Care Surgery*, vol. 81, no. 5, Nov. 2016, pp. 936–51, <https://doi.org/10.1097/TA.0000000000001209>.

Goldstein, Lee E., and Ann C. McKee. 'Shining (Laser) Light on Traumatic Brain Injury Blood Biomarkers'. *JAMA Neurology*, vol. 74, no. 9, Sept. 2017, <https://doi.org/10.1001/jamaneurol.2017.0800>.

Guidelines for the Management of Excited Delirium / Acute Behavioural Disturbance (ABD). https://rcem.ac.uk/wp-content/uploads/2022/01/Acute_Behavioural_Disturbance_Final.pdf.

Hankey, Graeme J. *Stroke: Your Questions Answered*. Churchill Livingstone, 2002.

Hasan, Tasneem F., et al. 'Diagnosis and Management of Acute Ischemic Stroke'. *Mayo Clinic Proceedings*, vol. 93, no. 4, Apr. 2018, pp. 523–38, <https://doi.org/10.1016/j.mayocp.2018.02.013>.

Hawker, J. I., et al. 'Trends in Antibiotic Prescribing in Primary Care for Clinical Syndromes Subject to National Recommendations to Reduce Antibiotic Resistance, UK 1995-2011: Analysis of a Large Database of Primary Care Consultations'. *Journal of Antimicrobial Chemotherapy*, vol. 69, no. 12, Dec. 2014, pp. 3423–30, <https://doi.org/10.1093/jac/dku291>.

HEART Score. <http://www.heartscore.nl/>.

HEART Score for Major Cardiac Events - MDCalc. <https://www.mdcalc.com/heart-score-major-cardiac-events#next-steps>.

Howard, Jerry Lee, et al. 'Preinjury Warfarin Worsens Outcome in Elderly Patients Who Fall From Standing'. *The Journal of Trauma: Injury, Infection, and Critical Care*, vol. 66, no. 6, June 2009, pp. 1518–24, <https://doi.org/10.1097/TA.0b013e3181a59728>.

IAP Publish Information Sharing Statement «Independent Advisory Panel on Deaths in Custody. <https://www.iapondeathsincustody.org/s/IAP-Information-Sharing-Statement.pdf>.

Information Sharing to Reduce Community Violence. https://rcem.ac.uk/wp-content/uploads/2021/10/QEC_Guideline_Information_Sharing_to_Reduce_Community_Violence_Sept2017.pdf.

Johnston, Victoria, et al. 'Fever in Returned Travellers Presenting in the United Kingdom: Recommendations for Investigation and Initial Management'. *Journal of Infection*, vol. 59, no. 1, July 2009, pp. 1–18, <https://doi.org/10.1016/j.jinf.2009.05.005>.

Larsen, Fin Stolze, et al. 'High-Volume Plasma Exchange in Patients with Acute Liver Failure: An Open Randomised Controlled Trial'. *Journal of Hepatology*, vol. 64, no. 1, Jan. 2016, pp. 69–78, <https://doi.org/10.1016/j.jhep.2015.08.018>.

- Lecky, Fiona E., et al. 'The Effect of Preinjury Warfarin Use on Mortality Rates in Trauma Patients: A European Multicentre Study'. *Emergency Medicine Journal*, vol. 32, no. 12, Dec. 2015, pp. 916–20, <https://doi.org/10.1136/emmermed-2014-203959>.
- Maas, Andrew I. R., et al. 'Traumatic Brain Injury: Integrated Approaches to Improve Prevention, Clinical Care, and Research'. *The Lancet Neurology*, vol. 16, no. 12, Dec. 2017, pp. 987–1048, [https://doi.org/10.1016/S1474-4422\(17\)30371-X](https://doi.org/10.1016/S1474-4422(17)30371-X).
- Maisel, Alan S., et al. 'Rapid Measurement of B-Type Natriuretic Peptide in the Emergency Diagnosis of Heart Failure'. *New England Journal of Medicine*, vol. 347, no. 3, July 2002, pp. 161–67, <https://doi.org/10.1056/NEJMoa020233>.
- Management of Domestic Abuse. https://rcem.ac.uk/wp-content/uploads/2021/10/Management_of_Domestic_Abuse_March2015.pdf.
- Management of Hyperkalaemia. <http://www.rcpe.ac.uk/sites/default/files/Maxwell.pdf>.
- Mason, Suzanne, Maxine Kuczewski, M Dawn Teare, et al. 'AHEAD Study: An Observational Study of the Management of Anticoagulated Patients Who Suffer Head Injury'. *BMJ Open*, vol. 7, no. 1, Jan. 2017, <https://doi.org/10.1136/bmjopen-2016-014324>.
- Mason, Suzanne, Maxine Kuczewski, Marion D Teare, et al. 'THE AHEAD STUDY: MANAGING ANTICOAGULATED PATIENTS WHO SUFFER HEAD INJURY'. *Emergency Medicine Journal*, vol. 31, no. 9, Sept. 2014, p. 775.1-775, <https://doi.org/10.1136/emmermed-2014-204221.1>.
- . 'THE AHEAD STUDY: MANAGING ANTICOAGULATED PATIENTS WHO SUFFER HEAD INJURY'. *Emergency Medicine Journal*, vol. 31, no. 9, Sept. 2014, p. 775.1-775, <https://doi.org/10.1136/emmermed-2014-204221.1>.
- Memorandum of Understanding – The Police Use of Restraint in Mental Health & Learning Disability Settings. https://rcem.ac.uk/wp-content/uploads/2021/11/Police_Use_of_Restraint_in_Mental_Health_and_LD_Settings.pdf.
- Montague, B. T., et al. 'Retrospective Review of the Frequency of ECG Changes in Hyperkalemia'. *Clinical Journal of the American Society of Nephrology*, vol. 3, no. 2, Feb. 2008, pp. 324–30, <https://doi.org/10.2215/CJN.04611007>.
- Moss, Alastair J., et al. 'The Updated NICE Guidelines: Cardiac CT as the First-Line Test for Coronary Artery Disease'. *Current Cardiovascular Imaging Reports*, vol. 10, no. 5, May 2017, <https://doi.org/10.1007/s12410-017-9412-6>.
- Moya, A., et al. 'Guidelines for the Diagnosis and Management of Syncope (Version 2009): The Task Force for the Diagnosis and Management of Syncope of the European Society of Cardiology (ESC)'. *European Heart Journal*, vol. 30, no. 21, Nov. 2009, pp. 2631–71, <https://doi.org/10.1093/eurheartj/ehp298>.
- Muir, Keith W., et al. 'Endovascular Therapy for Acute Ischaemic Stroke: The Pragmatic Ischaemic Stroke Thrombectomy Evaluation (PISTE) Randomised, Controlled Trial'. *Journal of Neurology, Neurosurgery & Psychiatry*, vol. 88, no. 1, Jan. 2017, pp. 38–44, <https://doi.org/10.1136/jnnp-2016-314117>.

NaTHNaC | Launchpad to Services. <https://nathnac.net/>.

National Review of Asthma Deaths | RCP London.
<https://www.rcplondon.ac.uk/projects/national-review-asthma-deaths>.

NCEPOD - Non-Invasive Ventilation: Inspiring Change (2017).
<http://www.ncepod.org.uk/2017niv.html>.

Oram, R. A., et al. 'Investigating Hypokalaemia'. BMJ, vol. 347, no. sep24 1, Sept. 2013, pp. f5137–f5137, <https://doi.org/10.1136/bmj.f5137>.

Pieracci, Fredric M., et al. 'Degree of Anticoagulation, but Not Warfarin Use Itself, Predicts Adverse Outcomes After Traumatic Brain Injury in Elderly Trauma Patients'. The Journal of Trauma: Injury, Infection, and Critical Care, vol. 63, no. 3, Sept. 2007, pp. 525–30, <https://doi.org/10.1097/TA.0b013e31812e5216>.

Pocket Guide to COPD Diagnosis, Management, and Prevention - 2017 - Global Initiative for Chronic Obstructive Lung Disease - GOLD.
<http://goldcopd.org/pocket-guide-copd-diagnosis-management-prevention-2016/>.

Ponikowski, Piotr, et al. '2016 ESC Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure'. European Heart Journal, vol. 37, no. 27, July 2016, pp. 2129–200, <https://doi.org/10.1093/eurheartj/ehw128>.

Post Cardiac Arrest Care.
<https://lifeinthefastlane.com/ccp/post-cardiac-arrest-resuscitation-care/>.

ProMED-Mail. <https://www.promedmail.org/>.

Published Guidelines | British Infection Association (BIA).
<https://www.britishinfection.org/guidelines-resources/published-guidelines/>.

Resuscitation to Recovery.
<https://www.resus.org.uk/publications/resuscitation-to-recovery/>.

Richman, Jeffrey M., et al. 'Does Continuous Peripheral Nerve Block Provide Superior Pain Control to Opioids? A Meta-Analysis'. Anesthesia & Analgesia, vol. 102, no. 1, Jan. 2006, pp. 248–57, <https://doi.org/10.1213/01.ANE.0000181289.09675.7D>.

Roffi, Marco, et al. '2015 ESC Guidelines for the Management of Acute Coronary Syndromes in Patients Presenting without Persistent ST-Segment Elevation'. European Heart Journal, vol. 37, no. 3, Jan. 2016, pp. 267–315, <https://doi.org/10.1093/eurheartj/ehv320>.

'Saline or Albumin for Fluid Resuscitation in Patients with Traumatic Brain Injury'. New England Journal of Medicine, vol. 357, no. 9, Aug. 2007, pp. 874–84, <https://doi.org/10.1056/NEJMoa067514>.

Scottish Intercollegiate Guidelines Network: 148. Acute Coronary Syndrome. A National Clinical Guideline. <https://www.sign.ac.uk/assets/sign148.pdf>.

Sensitivity of Computed Tomography Performed within Six Hours of Onset of Headache for

Diagnosis of Subarachnoid Haemorrhage: Prospective Cohort Study.
<https://www.bmj.com/content/bmj/343/bmj.d4277.full.pdf>.

Slack, Andrew J., et al. 'Ammonia Clearance with Haemofiltration in Adults with Liver Disease'. *Liver International*, vol. 34, no. 1, Jan. 2014, pp. 42-48,
<https://doi.org/10.1111/liv.12221>.

SSNAP - Home. <https://www.strokeaudit.org/>.

Sun, Benjamin C., et al. 'Priorities for Emergency Department Syncope Research'. *Annals of Emergency Medicine*, vol. 64, no. 6, Dec. 2014, pp. 649-655.e2,
<https://doi.org/10.1016/j.annemergmed.2014.04.014>.

Teasdale, Graham, et al. 'The Glasgow Coma Scale at 40 Years: Standing the Test of Time'. *The Lancet Neurology*, vol. 13, no. 8, Aug. 2014, pp. 844-54,
[https://doi.org/10.1016/S1474-4422\(14\)70120-6](https://doi.org/10.1016/S1474-4422(14)70120-6).

The Management of Diabetic Ketoacidosis in Adults.
http://www.diabetologists-abcd.org.uk/JBDS/JBDS_IP_DKA_Adults_Revised.pdf.

The Management of the Hyperosmolar Hyperglycaemic State (HHS) in Adults with Diabetes . http://www.diabetologists-abcd.org.uk/JBDS/JBDS_IP_HHS_Adults.pdf.

The Mental Capacity Act in Emergency Medicine Practice.
https://rcem.ac.uk/wp-content/uploads/2021/10/RCEM_Mental_Capacity_Act_in_EM_Practice_Feb2017.pdf.

The Patient Who Absconds.
https://rcem.ac.uk/wp-content/uploads/2021/10/RCEM_Absconding_Guidance_V2.pdf.

The Patient with Collapse: In Association with the Emergency Medicine Journal.
<http://learning.bmj.com/learning/search-result.html?moduleId=5004329>.

Trovato, Francesca M., et al. 'Update on the Management of Acute Liver Failure'. *Current Opinion in Critical Care*, vol. 25, no. 2, Apr. 2019, pp. 157-64,
<https://doi.org/10.1097/MCC.0000000000000583>.

Viral Haemorrhagic Fever: ACDP Algorithm and Guidance on Management of Patients - GOV.UK.
<https://www.gov.uk/government/publications/viral-haemorrhagic-fever-algorithm-and-guidance-on-management-of-patients>.

Wakil, A., et al. 'Investigating Hyponatraemia'. *BMJ*, vol. 342, no. mar07 2, Mar. 2011, pp. d1118-d1118, <https://doi.org/10.1136/bmj.d1118>.

Wendon, Julia, et al. 'EASL Clinical Practical Guidelines on the Management of Acute (Fulminant) Liver Failure'. *Journal of Hepatology*, vol. 66, no. 5, May 2017, pp. 1047-81,
<https://doi.org/10.1016/j.jhep.2016.12.003>.

WHO | Antimicrobial Resistance. <http://www.who.int/antimicrobial-resistance/en/>.

Williams, Michelle C., et al. 'Assessment of Patients with Stable Chest Pain'. *Heart*, vol.

104, no. 8, Apr. 2018, pp. 691–99, <https://doi.org/10.1136/heartjnl-2017-311212>.