EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1
Resuscitation of a patient with an Artificial Airway 4
Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5
Implications of Language Barriers for Health and Social Care 6
Management of new presentation of Atrial Fibrillation 8
Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
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Welcome to edition 21 of the Learning Matters Newsletter. Health and Social Care in Northern Ireland endeavours to provide the highest quality service to those in its care. We recognise that we need to use a variety of ways to share learning therefore the purpose of this newsletter is to complement the existing methods by providing staff with short examples of incidents where learning has been identified.

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy

A patient with significant co-morbidities in a high risk category for surgery (American Society of Anesthesiologists (ASA) Classification III: *A patient with severe systemic disease; Substantive functional limitations: one or more moderate to severe diseases)* was admitted for an elective laparoscopic cholecystectomy. The anaesthetic and surgical procedures were uneventful with the patient remaining stable throughout.

Following surgery the patient was transferred to the recovery ward, however due to ongoing pain requiring regular opiate analgesia, as well as oxygen support for Type 1 respiratory failure, they were admitted to the Intensive Care Unit (ICU) as a high dependency patient.

In ICU a chest x-ray indicated raised right hemi-diaphragm and patchy changes at the left base. It was noted the possibility of Pulmonary Embolism (PE) as cause of poor oxygenation, however the patient was not stable enough to attend the radiology department for Commuted Tomography Pulmonary Angiogram (CTPA). A bedside Focused Intensive Care Cardiac Echocardiogram (FICE) was performed and reviewed by the ICU Consultant. Diagnosis of acute right heart strain was made. Therapeutic Enoxaparin was commenced.

During day 2 following surgery the patient was reviewed regularly by the Consultant Surgeon and ICU Consultant. On the evening of day 2 post surgery, at 18:00 hours the patient was becoming increasingly hypotensive; Blood Pressure (BP) was 90/53, Pulse 96 and decreased urine output. There was no response to two 250ml fluid boluses. BP was 63/42 at 23:00 hours. Phenylephrine was not effective therefore a CVL (central venous line) was inserted at 00:30 and Noradrenaline was commenced. The patient was discussed with the ICU Consultant and Cardiology opinion was requested. Review of the ICU electronic records of day 2 indicate a drop in haemoglobin between 14:00 and 17:00 which coincided with the onset of further hypotension and tachycardia. Haemoglobin reading at 14:00 was **132**, and **121** at 17:00

LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

01:45 hours on day 3 post surgery the patient was seen by Cardiology CT1 (Core Trainee doctor 1) and discussed with the Cardiology Consultant. Lysis for the potential pulmonary embolism was not recommended due to recent surgery. The patient's family were contacted due to their deteriorating condition. The patient was intubated and ventilated. Senior ICU staff and surgical staff were in attendance. Over the next number of hours the patient had a full ICU review, however remained haemodynamically unstable requiring Adrenaline, Noradrenaline and Vasopressin. Haemoglobin was now noted to be **89**. Patient was on CRRT (continuous renal replacement therapy) support for renal failure.

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy — 1

Resuscitation of a patient with an Artificial Airway — 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping — 5

Implications of Language Barriers for Health and Social Care — 6

Management of new presentation of Atrial Fibrillation — 8

Engaging with service users experiencing homelessness — 10

Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

Several hours later a retrospective note by the ICU Consultant confirmed there was a discussion with the Surgical Consultant regarding the **potential diagnosis of intra-abdominal haemorrhage**, given the drop in haemoglobin and blood pressure accompanied by increased pulse rate. They concluded the patient would not survive a return to theatre.

The patient sadly passed away on day 3 post elective surgery. The coroner's post mortem concluded cause of death as **Intra-Abdominal Haemorrhage following Laparoscopic Cholecystectomy, and Hypertensive Heart Disease.**

This incident was initially reviewed as a complaint made by the family; however it was then escalated to a SAI due to the concern that the patient's death had not been reviewed at the surgical mortality and morbidity meeting (M&M), which is normal practice for all deaths and complex cases. It had not been discussed until 18 months later; therefore there was no peer discussion or consideration of the appropriateness of the treatment and care.

KEY LEARNING

Death following elective cholecystectomy is very rare, less than 1 in 1000, however in patients with significant co-morbidities the mortality can be in the region of 1 in 100.

For all post-operative patients who develop tachycardia and hypotension with a falling haemoglobin, haemorrhage must be considered as one of the main differential diagnoses.

The medical review for high-risk patients on admission should include; review of pre-assessment advice; and to record clearly the reason if advice/plan of care is not required at that time.

All patient deaths must be reviewed and discussed within 48 hours and recorded on the Regional Mortality and Morbidity (M&M) system and a mandatory Datix (incident report) completed if necessary. The M&M meeting must include those involved in the delivery of care, to enable peer review and to identify any urgent learning.

An earlier M&M review would have facilitated a timelier meeting with the patient's family to support them in understanding what happened and would have provided them the opportunity to ask questions to support the grieving process.

Key Guidance

Acutely ill adults in hospital: recognising and responding to deterioration (nice.org.uk)

National Early Warning Score (NEWS) 2 | RCP London

ASA Physical Status Classification System available at:

https://www.asahq.org/standards-and-guidelines/asa-physical-status-classification-system

LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
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Resuscitation of a patient with an Artificial Airway

Summary of Event

A patient with a history of a number of comorbidities including a traumatic brain injury, a progressive neurological condition of uncertain origin and overall general decline in health and mobility, was admitted to hospital following an unresponsive episode lasting five minutes. During the patient stay a bilateral vocal cord palsy was noted, necessitating the insertion of a tracheostomy and five day intensive care admission, followed by transfer to a general ward.

Five days later, the patient was found pale and unresponsive and cardiac arrest was confirmed. A cardiac arrest call was made and cardiopulmonary resuscitation (CPR) was commenced and a paediatric mask was placed over the tracheostomy.

The inner tube of the tracheostomy was not in place, a member of the arrest team did not use the correct terminology and asked for a new 'connector' but meant an 'inner tube'. In addition, the emergency box, which contained a number of inner tubes was obscured by the patient's screen and therefore not visible during the emergency.

Attempts at resuscitation were unsuccessful and the patient sadly passed away.

KEY LEARNING:

- Clear and unambiguous terminology is required in relation to equipment, particularly during CPR, to ensure patient safety.
- All staff must be made aware of the exact location of emergency equipment which should be visible and accessible at all times during management of the deteriorating patient.
- Members of the team should not only be familiar with the equipment available to them but must be trained and competent in how and when to use it.
- Resuscitation training must include management of the artificial airway, and ideally be carried out in conjunction with the Tracheostomy Outreach Team if applicable.

Key Guidance:
https://www.resus.org.uk/

LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

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Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping

Summary of Event

A patient was admitted with recurrent documented episodes of biliary sepsis and on this occasion had a further episode of cholecystitis. During the patient's stay a laparoscopic, converted to open, cholecystectomy was required. The patient was transferred back to a surgical ward where initially satisfactory progress was made, however four days later the patient's condition deteriorated.

Following a series of reviews and investigations it was determined that the patient had findings consistent with an **intra-abdominal sepsis and visceral perforation.** Laparotomy was performed the following morning, where the patient was found to have a perforation of the hepatic flexure of the colon. A non-restorative right hemicolectomy was performed.

A number of opportunities were missed on the evening of day 4 post surgery, when the patient began to deteriorate. In summary these relate to the patient requiring an earlier intervention in relation to; escalation of concerns regarding the National Early Warning Score (NEWS); reviewing blood tests; escalating concerns at night by junior medical staff to the surgical consultant on call, leading to a delay in return to theatre for a further surgical procedure.

There was a one and a half hour delay from learning of the definitive pathology and when the registrar saw the patient. This is contrary to the guidelines on the definitive management of intra-abdominal Sepsis as per the Association of Surgeons. It is widely recognised that either definitive management or a definitive plan leading to management must be confirmed at the earliest possible opportunity. In addition, there were retrospective notes entered into the patients notes, which were timed and dated in such a way to appear to be recorded contemporaneously rather than retrospectively.

Two months after the event the patient was discharged.

KEY LEARNING:

- There must be comprehensive handover for all patients with particular emphasis on patients who have potential deterioration and may prompt earlier review by a more senior doctor.
- Where medical staff require advice from a more senior doctor, they must escalate their concerns at the earliest opportunity.
- All medical staff should be trained on the Sepsis 6 protocol and the importance of early recognition of sepsis and its management.
- Where possible entering retrospective notes into the patient chart should be discouraged. Should a retrospective note be required, the staff member should include their name, the date and time of the added note, the findings on examination and an explanation as to why these were not recorded at the time.

Key Guidance:

- Sepsis 6
- GMC Good Medical Practice

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

Implications of Language Barriers for Health and Social Care

There have been two serious adverse incidents (SAIs), where there were issues with communication and inadequate use of interpreting services.

In case one, the patient presented to the Emergency Department (ED) with a one day history of epigastric pain radiating to their back. The patient was triaged and given pain relief before being seen by a locum middle grade doctor. The patient and their spouse, who was also in attendance, were both registered as deaf and a translator was organised by the family. The translator was not present when the doctor assessed the patient and communication was difficult between the patient and the doctor for this reason. The patient had an electrocardiogram (ECG), chest x-ray, bloods and was assessed as being fit for discharge, sadly this patient died at home the following day.

In case two, the patient had relocated to Northern Ireland from Eastern Europe. English was not the patient's first language and a number of entries in the medical notes record that the patient's English was not good. The patient had a supportive family member who spoke good English; this family member accompanied the patient to the majority of appointments/interventions. Surgery was performed on the right lobe of the patient's thyroid instead of the left thyroid lobe i.e., wrong site surgery, which is classed as a Never Event. Contributory factors to this incident included inadequate communication and documentation.

Whilst an interpreter is noted to have been present at the time of admission to hospital, it is unknown whether they remained with the patient until the induction of anaesthesia as per normal practice. An interpreter was not present at all appointments. Whilst it is acknowledged that the patient's relative was present during appointments etc., an interpreter, who is not a family member, should have been present at the time of all clinical discussions/procedures as per General Medical Coucil (GMC) guidance. There was no formal system for recording of information given to the interpreter. There was no record of information provided to the interpreter nor is there a record of conversations between the interpreter and the patient. Further to the incident, the patient underwent the correct surgery required and has made a good recovery.

A number of key learning points and recommendations have been highlighted relating to both these incidents. These are in relation to communication and documentation.

LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

KEY LEARNING:

- The interpreting service should be advised of all hospital consultations for patients / clients who are deaf/or have hearing difficulties and bookings made for each of these.
- Family should not be used for interpreting, to ensure accuracy and impartiality of interpreting; minimise legal risk of misinterpretation of important clinical information and to minimise safeguarding risk (for example for victims of human trafficking, where the trafficker may introduce themselves as family member or friend and speak on behalf of the patient)
- The interpreting service should consider implementing recording all communications in writing and provide them to the Trust for inclusion in the patient notes.
- It's vital that the surgery/hospital (not the patient) book an interpreter in advance of the patient's appointment.
- The healthcare professional should talk directly to the patient, not the person interpreting for them.

For patients / clients who are deaf/or have hearing difficulties

- The healthcare professional should have the patient's attention before talking. The patient should be able to see the interpreter.
- The healthcare professional should maintain eye contact with the patient whilst communicating and avoid covering their mouth when speaking.
- The healthcare professional should use normal lip movement to enable the person to lip-read.

Key Guidance:

- Health and Social Care Interpreting Service Guidance for HSC Staff and Practitioners
- GMC Good Medical Practice

LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

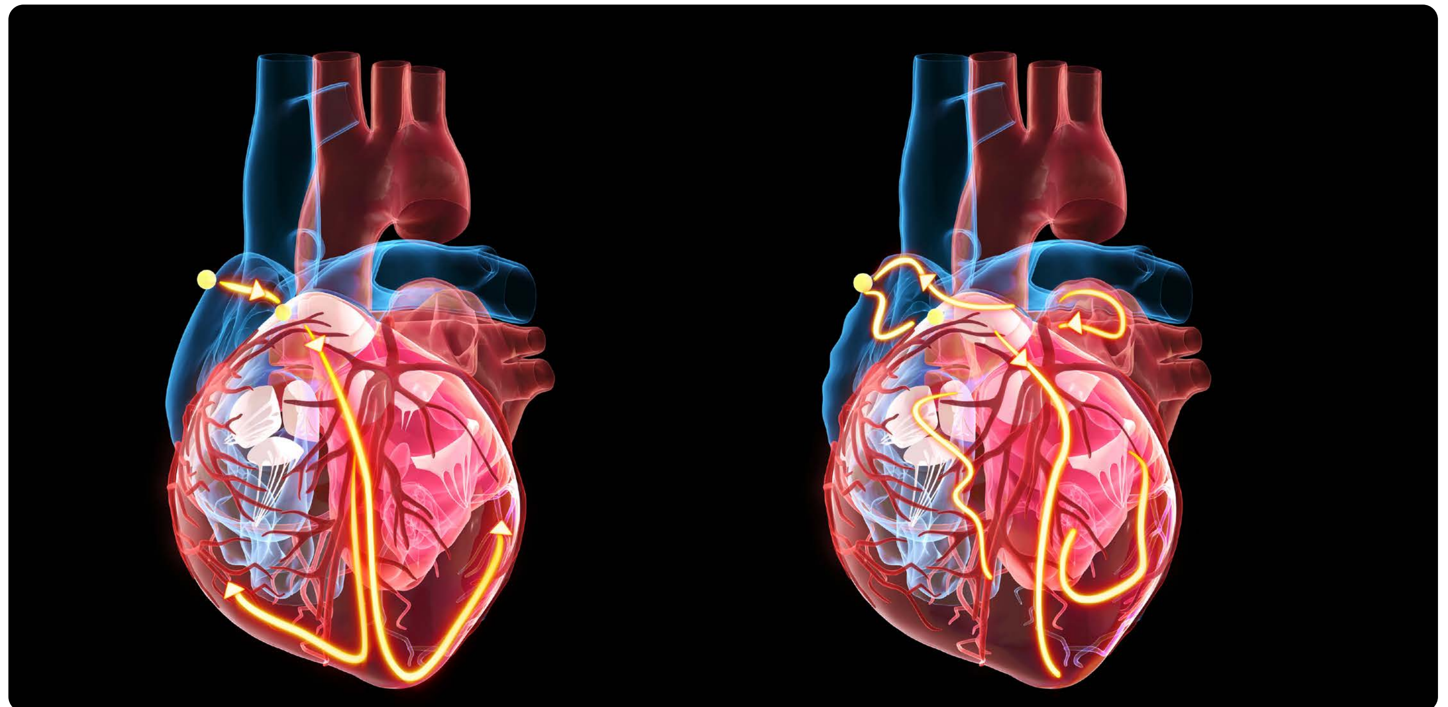
Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

Management of new presentation of Atrial Fibrillation

A patient in their 30s attended the Emergency Department (ED), complaining of sudden onset of dizziness, tingling down both arms and shortness of breath (SOB). They denied any history of collapse, loss of consciousness, nausea, vomiting or having experienced any previous similar episodes. There was no history of cough, chest pain or calf swelling. The only past medical history of note was asthma, for which the patient was taking a steroid inhaler. Otherwise the patient was a non-smoker and presumed fit and healthy.

An electrocardiogram was performed which confirmed new **Atrial Fibrillation** (AF) with a ventricular response rate of 158 bpm. A range of blood tests including electrolytes and troponin were sent for analysis. Following discussion on the treatment plan for the patient with the on-call ED Consultant, a decision was made to perform a Direct Current Cardioversion (DCC) in the ED, which was in keeping with national policy. The patient safely underwent DCC in the Resuscitation room; requiring one 150J shock which reverted the heart rate back to normal sinus rhythm (NSR) at 98bpm, confirmed by an ECG post-procedure. The plan was to observe the patient for 2 hours post-sedation and only consider discharge 4 hours post procedure. A plan was put in place for medical assessment concerning anticoagulation and follow up.

Biochemical tests performed were within normal range for the most part; including down trending serial troponins from 19ng/L to 15ng/L (normal range <14ng/L), normal



LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

inflammatory markers, thyroid function tests (TFTs) and blood electrolytes, barring a moderate hypophosphatemia.

Following the recommended observation period, the patient was reviewed by a third medical doctor, who noted normal heart sounds and observations, coupled with an ECG post-DCC indicating NSR. The plan was to discharge the patient home with a cardiology outpatient follow-up appointment. The patient was discharged home with no medication.

A few days later ED staff were informed that the patient had passed away. A review into the death found that on the day the patient presented to the ED, they had an episode of **loss of consciousness**, which resulted in them crashing their vehicle. This was not disclosed to the ED team at the time of attendance to the department. It also came to light that they had complained to their family about feeling unfit after walking, feeling cold and being tired. Given that the patient felt tired on exertion, the review team suggested that the patient may have been suffering with an undiagnosed heart condition for some time leading up to their presentation to the ED.

The patient's most recent chest x-ray was performed 5 months prior to the ED attendance and it indicated the heart size and pulmonary vascularity were within normal limits. **No CXR** was performed during this most recent attendance despite the patient's complaint of SOB. An updated CXR might have shed light on an underlying cause and ultimately changed the management plan for the patient.

CLINICAL GUIDANCE RELEVANT TO THIS SERIOUS ADVERSE INCIDENT

In April 2021 the National Institute for Health and Care Excellence (NICE) published guidance relevent to the learning from this serious adverse incident.

This guideline covers diagnosing and managing atrial fibrillation in adults. It also includes guidance on providing the best care and treatment for people with atrial fibrillation, including assessing and managing risks of stroke and bleeding.

KEY LEARNING:

- **New onset of AF** in a young patient is very unusual. The diagnosis of the underlying cause in this case was complicated by the incomplete history provided to medical staff.
- New onset AF has different aetiology in younger populations, compared to those over 70 where the prevalence is considered 10% or more.
- Clinicians should carefully consider the underlying cause of AF in young patients with a presentation such as this. Investigations should include a chest x-ray and consideration should be given to echocardiography.
- A cardiology assessment is recommended for this group of patients, which can be either while in hospital or as an outpatient, depending on the clinical circumstances.
- Trusts must ensure that existing guidelines on the management of Atrial Fibrillation on their intranet site are easily accessible and simple to navigate.

LEARNING MATTERS

EDITION 21
JUNE 2022

IN THIS EDITION

The Post-operative Deteriorating Patient: Differential diagnosis following elective laparoscopic cholecystectomy 1

Resuscitation of a patient with an Artificial Airway 4

Responding to the deteriorating patient: appropriate recognition, escalation, handover and record keeping 5

Implications of Language Barriers for Health and Social Care 6

Management of new presentation of Atrial Fibrillation 8

Engaging with service users experiencing homelessness 10

Link below to previous Learning Matters:
Learning Matters Newsletters | HSC Public Health Agency (hscni.net)

Engaging with service users experiencing homelessness

People experiencing homelessness have significant physical and mental health needs which may require an increased number of health and social care (HSC) appointments.

They are more likely to have short-term addresses, move around frequently or have no fixed abode.

During initial contact with Health and Social Care (HSC) services, a service user with no fixed abode requested that all correspondence regarding appointments should be sent to a relative's address.

Subsequent letters were sent to the service users own temporary accommodation rather than their relatives address. As a result of this instruction not being followed the service user missed appointments and therefore access to health care.

KEY FINDINGS AND LEARNING:

It is essential that reliable contact details are discussed and recorded with service users at every opportunity / interaction.

Staff must ensure that '**care of**' or **preferred** correspondence addresses are recorded in both electronic and written records, especially if the service user is experiencing homelessness has no fixed abode.

Staff must ensure records relating to **'preferred correspondence**' are checked prior to sending out any appointment letters or other correspondence to service users.

Key Guidance:
NICE Guidance: Integrated health and social care for people experiencing homelessness

If you have any comments or questions related to this Edition of Learning Matters please get in contact by email at learningmatters@hscni.net

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