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The Covert Malignant Polyp – A review of a New Protocol

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Background

Bowel cancer is the 4th most common malignancy in the UK. Bowel cancers arise from colonic polyps. One of the aims of colonoscopy is to identify polyps and remove them before they turn into cancer interrupting the adenoma - carcinoma sequence, reducing an individual's risk of cancer and reduce bowel cancer mortality.

Occasionally polyps are removed that are thought to be benign but when histologically assessed do harbour malignancy and these are termed "covert malignant polyps". A covert malignant polyp may not have been completely excised and the patient is at risk of residual malignancy (RM). Even if the malignant polyp has been completely excised the patient may have lymph node metastases (LNM) which may not be evident endoscopically either at the time of polypectomy or on subsequent endoscopic surveillance.

Risk of RM and LNM are influenced by polyp morphology (pedunculated vs sessile), histological depth of invasion (Haggitt score and Kikuchi score), whether the polyp was removed en bloc or piecemeal and histological features such as poor differentiation, presence of tumour budding, lymphovascular invasion[1].

Future management decisions after removal of a covert malignant polyp can be difficult for clinicians, patients and multidisciplinary teams (MDT) with the main options of a surgical resection or intense endoscopic surveillance.

Predicting risk of RM is difficult. There is some guidance from national organisations such as the ACPBGI however locally the surgical team felt there had been a cluster of patients whom the risk of RM/LNM had been overestimated and had led to patient undergoing bowel resections for no RM/LNM to be found in the resected specimen. Therefore, the surgical department revised their risk protocol to help clinicians and patients with discussions.

The new protocol for sessile polyps is summarised below:

Low risk polyp	High risk polyp
• R0 (cancer >1mm from the resection margin) • Only 1 negative prognostic features*	• R1 (cancer <1mm from resection margin) • SM3 (in a sessile polyp) • >1 negative prognostic feature*
Recommendation: Surveillance	**Recommendation: Resection**

*poor differentiation, LVI, tumour budding

Aims

To retrospectively analyse the outcome of patients with covert malignant polyps using the New Protocol to ensure it is risk stratifying covert malignant polyps appropriately.

Methods

We reviewed all covert malignant polyps excised over a 4 year period (Jan 2019 - Dec 2022) and using electronic records including CITO and Lorenzo collected data on polyp characteristics, MDT recommendations, clinic discussions and long term outcomes of the patients.

Results

During the 4 year period there were 81 cases of covert malignant polyps identified at RDH. The median age at referral was 66 years old, range (48-88) with 54% male predominance. 23/81 (28%) were pedunculated vs 58/81 (72%) sessile polyps.

Using the New Protocol, surveillance was recommended for 56.9% (n=33/58) patients. Of these patients, 81.8% (n=27/33) had surveillance and the remaining 18.2% (n=6/33) underwent surgery, see Figure 1.

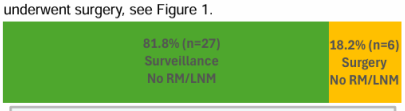

Figure 1 – Patients identified as requiring surveillance with the new protocol and RM/LNM outcomes

100% (n=6/6) of patients who had surgery were found to have no histological RM. The mean hospital admission was a median of 6 days (range 2-28). All patients who had endoscopic surveillance were all clear to FU over 29 months.

Using the New Protocol, surgery was recommended for 43.1% (n=25/58) patients, see Figure 2. Of these patients, 64.0% (n=16/25) had surgery with 31.3% (n=5/16) having RM or LNM in the resected specimen. 28.0% (n=7/25) had surveillance, with 42.8% (n=3/7) having recurrence on follow up endoscopy. 2.0% (n=2/25) had chemoradiotherapy due to rectal lesions in comorbid patients.

Figure 2 – Patients identified as requiring surgery with the new protocol

Discussion

A position statement from ACPGBI suggests that a high potential risk of residual cancer is >20% and low <3%[1]. This data would support that the New Protocol is able to risk stratify covert malignant polyps into low and high risk accurately. No patients identified by the New Protocol as low risk and therefore requiring surveillance had any RM or LNM. This suggests that the protocol could have prevented unnecessary surgery and subsequent morbidity and hospital admission. Additionally, the New Protocol accurately identifies higher risk polyps and therefore is helpful for clinicians and patients to be guided towards surgery.

The final recommendation and patient decision will be influenced by many factors including patient desire to avoid surgery and potential stoma, comorbidities and patient acceptance of uncertainty with endoscopic surveillance. The New Protocol will help lead these challenging discussions and help patients and clinicians make an as informed decision as possible.

Conclusions

The review concludes that the New Protocol implemented by the RDH surgical team is good at differentiating between low and high risk covert malignant sessile polyps. As a result, this can be an invaluable tool to assist the clinician and patient in future management decisions.

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TTR Amyloidosis and the Carpal Tunnel: Cardiac Amyloidosis identified from Carpal Tunnel Biopsy

Miss Victoria Knox (Trauma and Orthopaedics ST3), Mr C. Heras-Palou

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Figure 1

What is TTR Amyloidosis?

TTR Amyloidosis is a disease in which the abnormally folded plasmatic protein Transthyretin, gets deposited extracellularly in tissues and organs.

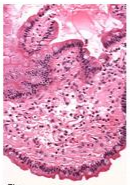

Figure 2

Why is this important?

The unstable, misfolded protein readily aggregates and deposits in the heart resulting in cardiomyopathy. This can either be hereditary (hATTR-CM) or wild-type (wATTR-CM).[2]

Figure 3

The Pulvertaft Hand Centre within the Royal Derby Hospital

Association with Carpal Tunnel?

Carpal tunnel release presents an opportunity to biopsy synovial tissue and the retinaculum.
Recent studies have shown that 10.2% of men >50 and women >60 years had amyloidosis on tenosynovial biopsy.

Amyloid Cohort Study

To date the Pulvertaft Unit has recruited 334 patient to the amyloid study.
72 patients were positive for amyloid.
56 patients attended the National Amyloidosis Centre.

24.1% of which were diagnosed with Cardiac Amyloidosis, all of whom had no existing cardiac co-morbidity at the time of diagnosis

Patient X is one of these cases

Conclusion

Patients with cardiac amyloidosis are often diagnosed late, at advanced stages of heart failure.
This study indicates that identifying amyloid deposition post-carpal tunnel surgery can lead to earlier diagnoses.
This has enabled patients to begin treatments aimed at preventing heart failure progression and potentially halting the accumulation of amyloid proteins in the heart and other tissues.
Further research is necessary to establish the feasibility and cost-effectiveness of integrating this into routine practice.

Patient X's Journey

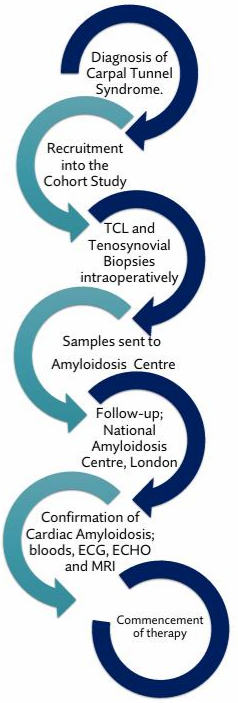

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Figure 1. *Carpal tunnel release*
Figure 2. Stainsfile.com Amyloid
Figure 3. Radiopedia.org Cardiac Amyloidosis

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Reporting of concomitant and rescue topical therapies in eczema randomised controlled trials evaluating a systemic treatment: a scoping review

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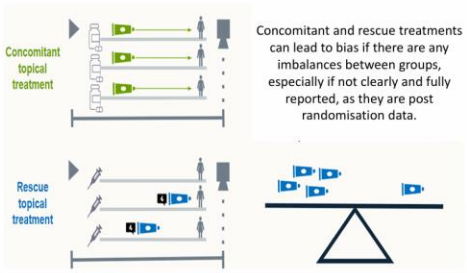
*WCGF and SL contributed equally

Background

In Atopic Dermatitis, (AD) a large number of biologics and small molecules are being studied in many randomised clinicals trials (RCTs). These trials utilise topical treatments such as topical steroids, either throughout the trial (concomitant) or/and as a rescue treatment (rescue).



Concomitant and rescue treatments can lead to bias if there are any imbalances between groups, especially if not clearly and fully reported, as they are post randomisation data.

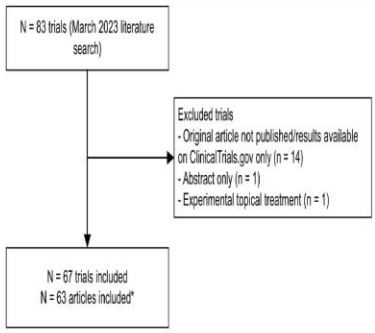
Aim and Methods

Aim: To evaluate current practices of reporting topical treatments in AD systemic medication RCTs.

AD systemic medication RCTs included in the living systematic review and network meta-analysis of AD systemic treatments by Drucker et al (n=83), spanning from inception to March 2023 were screened to only include published RCTs evaluating systemic immunomodulatory treatments. Data were extracted by two independent reviewers. The primary outcomes was the proportion of RCTs that clearly reported the allowance or prohibition of i) concomitant and ii) rescue topical therapies

Results (1)

Figure 1: Flowchart of included studies



Results (2)

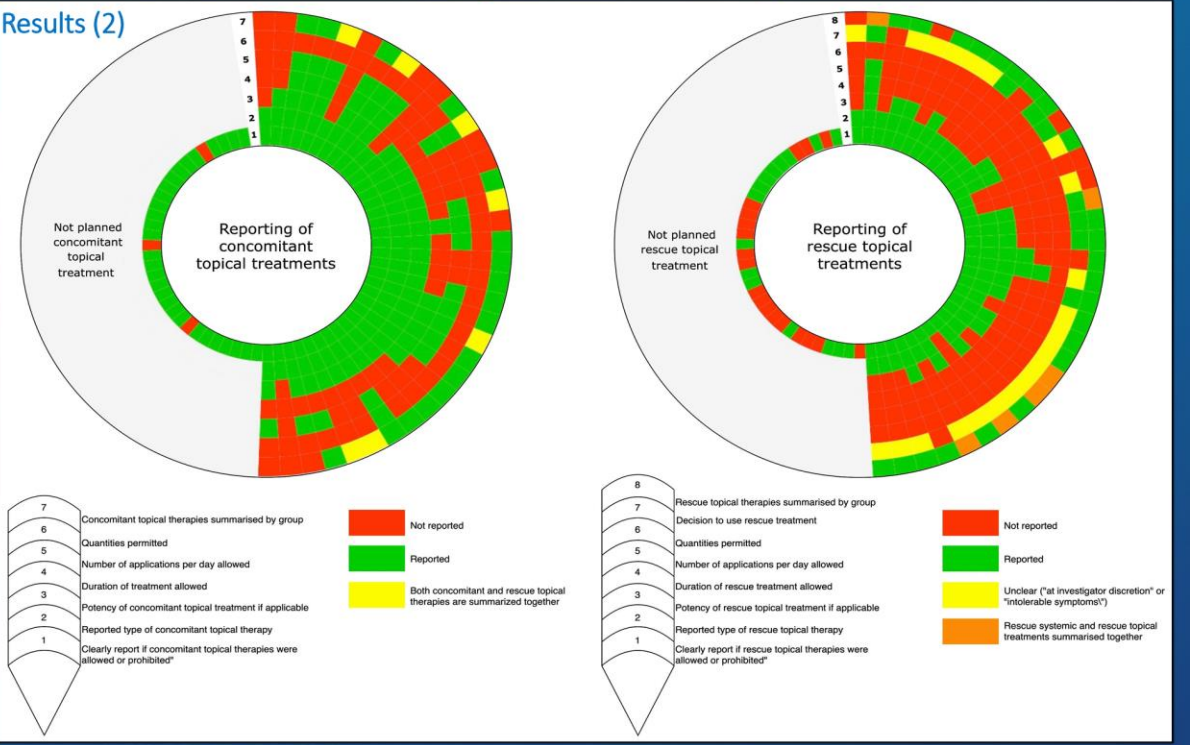


Figure 2 is a summary of the key results for the reporting of concomitant and rescue topical therapy. Each vertical stripe represents one RCT while each circle represents one domain. Circle 1 (primary outcome) - only 3/63 trials did not report any information on concomitant topicals, while 18/63 trials did not report anything on rescue topicals. All trials permitting concomitant therapies consistently reported the type (Circle 2) though other details on were less frequently reported (potency, quantity – circle 3 and beyond). Similarly, trials allowing rescue treatments often specified the type (circle 2) but provided limited information on other factors.

Conclusion

Although most AD clinical trials of systemic treatments report concomitant topical treatments, reporting practices for rescue topicals were less consistent and inadequate. A standardized approach to reporting topical therapy in AD trials is needed to enhance transparency and interpretability

Protocol

Email

WCGF is an NIHR Academic Clinical Fellow

It started with a Bang! Disseminated intravascular coagulopathy (DIC): First presentation of advanced malignancy.

W Shayo, R Lai, P Pradhan, Acute Medicine Department, Royal Derby Hospital.

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Introduction

Disseminated Intravascular Coagulopathy (DIC) is a systemic process resulting in widespread microvascular thrombosis and consumption of clotting factors, leading to bleeding diathesis. DIC can be associated with multiple conditions (see Table 2). Malignancy-associated DIC can occur in advanced cancers, particularly prostate cancer, and poses significant diagnostic and management challenges.

Case Presentation

A gentleman in his 50s presented to the Accident and Emergency (A&E) Department following a road traffic accident. He was driving at 30mph and airbags were not deployed.

He has a past medical history of hypertension.
He was discharged after a satisfactory skeletal survey and was given safety netting advice regarding concussion.

On Day 3, he re-presented to A&E with generalised headache, myalgia and a new left forearm tender swelling. He was referred to the Medical Same Day Emergency (MSDEC) to exclude left upper arm deep vein thrombosis (DVT) and possible left elbow haematoma.

On further history, he reported a 4-week history of malaise, non-specific joint stiffness and pelvic pain. This was associated with occasional numbness and tingling which improves with exercise. He attributed these symptoms to manual labor. He denied any features of bleeding.

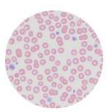
On examination, he had evidence of a new bruise overlying his left elbow joint with limiting range of motion. He had widespread hyperpigmented fading old bruises. Systemic examination including neurological examination was unremarkable.

Investigations & Results

TEST	RESULTS
HB	112
WBC	8
Platelets	71
Bilirubin	11
ALP	154
AST	30
TP	69
Albumin	41
PT	12.8
INR	1.16
APTT	24.3
APPT ratio	1.0
Fibrinogen	0.89
D-dimer	22149
LDH	352
Reticulocytes	103

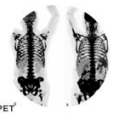
Table 1: Investigation results

Key Imaging & Tests

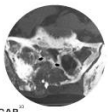


Blood film[7]
Reduced platelets, no clamps

Bone Marrow Biopsy[8]
Disseminated prostate cancer



PET[9]
Diffuse FDG uptake in axial and proximal appendicular skeleton.



CT CAP[10]
Destructive lesions in pelvic bones (sacral ala, iliac bone).

MRI Spine[11]
Disseminated prostate metastases.

PSA[12]
1065 ng/mL (elevated).

Figure 1: Investigations and Key Imaging and Tests for the patient with disseminated intravascular coagulopathy (DIC)

Key Management

He underwent multiple investigation including an USS scan of his left arm which came back negative for haematoma, a myeloma screen was negative.
He was discussed with the Haematology team and was started on Platelet transfusion and Cryoprecipitates.

His other specialist investigations including blood film, bone marrow biopsy, PET, CT CAP, MRI Spine and PSA as shown with results.

Patient Outcome

He was referred to the Oncology Team with prostate Ca - for first line palliative therapy with Docetaxel/Darolutamide for which he declined.
He is currently on indefinate androgen deprivation therapy-Apalutamide.
According to the Prostate Cancer Research UK, those with Stage 4 disease have a 50% 5-year survival rate.

Learning points

Detailed History: Symptoms like unexplained bruises and family history of malignancy are critical.

Recognition of DIC: Early identification of coagulopathy warrants urgent replacement of platelets and fibrinogen.

There are multiple conditions which are associated with DIC.

DIC can be an initial manifestation of advanced cancers like prostate cancer.

Clinical presentation

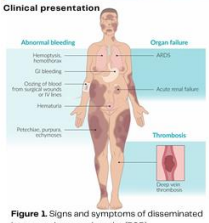


Figure 1. Signs and symptoms of disseminated intravascular coagulopathy (DIC)

Causative factor	Organisms/conditions attributable to DIC
Infections	Bacterial - Sepsis by Gram-negative bacilli, Gram-positive cocci
	Viral - CMV, HIV, hepatitis, dengue
	Fungal - Invasive pulmonary aspergillosis
	Parasitic - Malaria, leptospirosis
	Rickettsial
Malignancy	Solid tumours - Adenocarcinoma of pancreas, prostate
	Haematological - AML-M3
Obstetric	Amniotic fluid embolism
	Abruptio placentae
	Preeclampsia
	Dead foetus syndrome
	Retained products of placenta
Toxic and immunological insults	Viper snake bites
	Massive transfusion
	ABO transfusion incompatibility
	Graft versus host disease
Massive inflammation	Severe trauma, crush injuries, massive burns, severe hypo-hyperthermia, severe pancreatitis, gunshot brain injury
Vascular disorders	Aortic aneurysms
	Giant haemangiomas (Kasabach-Merritt syndrome)
Liver diseases	Fulminant hepatic failure, fatty liver of pregnancy

CMV – Cytomegalovirus, HIV – Human immunodeficiency virus, DIC – Disseminated intravascular coagulopathy, AML-M3 – Acute pro-myelocytic leukaemia

Table 2: Causative factors for disseminated intravascular coagulopathy (DIC)

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Too Little, Too Late:

An audit on inpatient topical steroid application following Dermatology Review

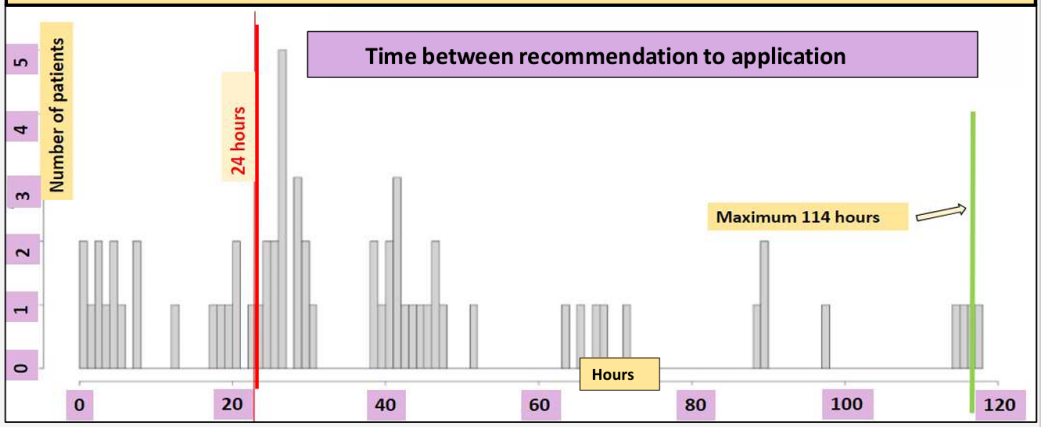
Nambi A[1], Ojelabi M[2], Al Sadek Y[3], Elston G[4]

1, 2, 3 & 4: Department of Dermatology, Queen's Hospital Burton, University Hospitals of Derby and Burton NHS Foundation Trust

Background:

- Anecdotal delays in application of topical corticosteroids(TCS) following recommendation by Dermatology have been noted at both Derby and Burton sites.
- **2022 Derby Audit:** 46 patients
  - Average wait time: **51** hours
  - Only **13%** had TCS applied within 24 hours of recommendation.
- We conducted a similar retrospective audit of 63 patients at **Burton.** **(2022-23)**

Audit standard: 100% of inpatients to receive TCS within 24 hours of recommendation



Key Findings:

- Only **27%** met audit standard.
- Longest wait time for application was **114** hours.
- Average wait time: just over **39** hours.

Implemented Action points:

- Educational presentation at Burton to improve awareness.
- Encourage prescription of TCS by reviewing dermatologist if out of hours/severe presentation.
- Liaison with pharmacy team regarding ward supply of TCS.

“Contrast-Induced Nephropathy: Fact, Fiction, or Fading Fear?”

Dr. Abdul Hanan Naikoo.

Definition:

CIN is traditionally defined as an acute kidney injury (AKI) occurring after the administration of iodinated contrast media. It’s characterized by a rise in serum creatinine within 48–72 hours, without an alternative cause.

Controversy:

Recent studies question whether CIN is as traditionally believed, or other factors, such as baseline renal dysfunction or hemodynamic instability, may play a larger role.

Myths vs. Evidence

1. CIN is a Common Complication
   - Myth: CIN is inevitable, especially in high-risk patients (e.g., those with chronic kidney disease or diabetes).
   - Reality: Recent large-scale studies indicate that AKI post-contrast may often be attributed to other risk factors like dehydration, medication, or critical illness, rather than the contrast itself.

2. High Contrast Volume is Always Harmful
   - Myth: Any amount of contrast media is toxic to the kidneys.
   - Reality: Modern low- and iso-osmolar contrast agents are safer, even at high doses, compared to older high-osmolar agents. The risk of CIN is reduced with proper hydration and protocol adjustments.

3. CIN is Preventable by Prophylactic Measures
   - Myth: Measures like N-acetylcysteine (NAC), bicarbonate infusion, and low-dose contrast guarantee prevention.
   - Reality: Current evidence supports hydration as the most effective prevention. The efficacy of NAC and bicarbonate remains controversial and lacks consistent data.

4. CIN is a Leading Cause of Hospital-Associated AKI
   - Myth: CIN is a major contributor to morbidity in hospitalised patients.
   - Reality: Studies comparing contrast and non-contrast groups show similar rates of AKI, indicating that underlying patient conditions may drive the AKI incidence rather than contrast use.

Studies demonstrating evidance

1. *Association Between IV Contrast Media Exposure and Acute Kidney Injury in Patients Requiring Emergency Admission: A Nationwide Observational Study in Japan*
   Ryo Hisamune [1], Kazuma Yamakawa [1], Yutaka Umemura [2], Noritaka Ushio [1], Katsunori Mochizuki [1], Ryota Inokuchi [3], Kent Doi [3], Akira Takasu [1]

   Conclusion: In this large observational study, IV contrast media was not linked to a higher risk of AKI and appeared to reduce in-hospital mortality for emergency patients.

2. *The challenges in assessing contrast-induced nephropathy: where are we now?*
   Matthew S Davenport [1], Richard H Cohan, Shokoufeh Khalatbari, James H Ellis

   Conclusion: The previously overstated risk of contrast-induced nephropathy (CIN) has been clarified by recent studies, showing a much lower incidence than once believed.

3. *Contrast Induced Nephropathy In High Risk Patients - Myth Or Reality*
   Zahid Nabi [1], Nosheen Anjum [1], Raja Muhammad Rashid [1], Zahid Ul Zahideen [1]

   Conclusion: Our study has raised serious question on incidence of CIN in high risk patients as reported previously. However, more studies are needed over this issue till that time we might consider CIN A myth rather than a reality.

4. *Contrast-associated acute kidney injury is a myth: Yes*
   Stephan Ehrmann, Doron Aronson, and Jeremiah S. Hinson

   There are many well-established risk factors for AKI (Fig. 1), many of which have clear causal relationships with AKI and are readily modifiable, yet are often ignored as episodes of AKI are attributed to CM.

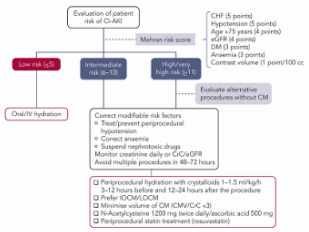
5. *Risk of Intravenous Contrast Material–mediated Acute Kidney Injury: A Propensity Score–matched Study Stratified by Baseline-estimated Glomerular Filtration Rate*
   Jennifer S. McDonald , Robert J. McDonald , Rickey E. Carter, Richard W. Katzberg, David F. Kallmes, Eric E. Williamson

   Conclusion: Diminished eGFR is associated with an increased risk of SCr-defined AKI following CT examinations. However, the risk of AKI is independent of contrast material exposure, even in patients with eGFR of less than 30 mL/min/1.73 m2.

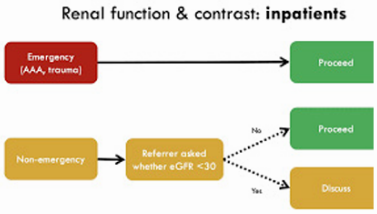
CT in Emergencies: Speed Over Risk for Life-Saving Diagnosis

The Joint Advisory Statement from The Royal College of Radiologists and the Royal College of Emergency Medicine outlines guidelines for the use of iodinated contrast agents in emergency CT scans. It emphasizes that concerns about Contrast-Induced Acute Kidney Injury (CI-AKI) should not delay emergency imaging, even in patients with abnormal renal function or those on metformin. The statement suggests that renal function tests and pre-hydration are not necessary before scanning in emergency situations, especially when delay could worsen the patient’s condition. The decision to proceed with the scan is the responsibility of the requesting clinician, with senior clinical involvement encouraged. Emergency departments should follow the iRefer guidelines when deciding on imaging requests. The statement highlights that age and pre-existing conditions like diabetes or renal disease should not be reasons for delaying emergency CT scans involving intravenous iodinated contrast.

Risk stratification and management:



Source: Marciyasa, Putu & Kandarini, Yenny & Mahadita, Gede Wira & Ayu, Nyoman. (2024). Contrast media induced nephropathy: case series and review of the literature focusing on management. Universa Medicina. 43. 252-261. 10.18051/UnivMed.2024.v43.252-261 https://www.researchgate.net/publication/383320829_Contrast_media_Induced_nephropathy_case_series_and_review_of_the_literature_focusing_on_management/citation/download



Guideline for the Administration of IV Contrast Media in Patients at Risk of Contrast Induced Nephrotoxicity (CIN) - Norfolk and Norwich University Hospital, based on Two important papers on CIN were published in Radiology, also in 2013. McDonald et al demonstrated that rates of acute kidney injury (AKI) following CT were independent of whether or not IVCM had been administrated in a large cohort