Letters

THE BELFAST CUTANEOUS INSTITUTION AND MALCOLM'S INTEREST IN SKIN DISEASE

Editor,

It has been claimed that there was no record of dermatology in Belfast until 1865 when Henry Samuel Purdon established the Belfast Dispensary for Diseases of the Skin in Academy Street.[1,2,3] Andrew George Malcolm, however, mentioned in a brief note, probably written shortly before his death in September 1856, that in July 1848 he had revived the Belfast Cutaneous Institution. Unfortunately no other reference to this establishment has been discovered.

Dr H G Calwell, Malcolm's biographer, gave a copy of the note (which he entitled *A Record of A G Malcolm's Life Written by Himself*) to the Public Record Office of Northern Ireland.[4] Malcolm called it *Mems. of Public Matters* and listed in it various events in his life including "Opened revived Extern Department for the Treatment of Injuries and Cutaneous Diseases and Affections of Children at the General Hospital" in December 1848; "Purchased large collection of Thibert's Wax Models of Cutaneous Disease for about £15" in November 1849; and "Put up a steam bath for Scalp-Diseases which (December) works well at the General Hospital" in November 1851. He also recorded delivering six courses of instruction on Diseases of the Skin from 1849 to 1856, that in 1852 consisting of 16 lectures for which he charged 10/6 (just over 52p).

In a lecture to the Belfast Medical Society on 2 February 1852 he discussed his reasons for modifying the classification of diseases of the skin. The minutes read: "After specifying his objections to previous systems as founded too exclusively either upon anatomical considerations or on the sensible qualities of cutaneous affections, the writer selected, in preference, pathological relations as the basis of his first general division, and arranged all skin diseases under the 2 primary heads or orders of Functional and Organic. The former class he subdivides according to the tissues or structures of which the functions are altered; and the organic order he arranges under 4 pathological genera according as they are the result of common irritation, of animal poisons, of constitutional specific disease, or consist of malformations and other vicious developments." [5]

Malcolm, like Purdon, was not a full-time dermatologist but clearly he had an early interest in skin disease, as did the unknown founder of the Belfast Cutaneous Institution.

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REFERENCES

1. McCaw IH. A synopsis of the history of dermatology. Opening address to Students, Royal Victoria Hospital, Belfast; Winter Session, 1944-5. *Ulster Med J*. 1944; **13(2)**: 109–22. PMID: 20476317

2. Hall R. History of dermatology in Northern Ireland. *Br J Dermatol*. 1970; **83(6)**: 690–7

3. Devereux CE, Eedy DJ. A history of dermatology in Ireland. *Ulster Med J* 2010; **79(2)**: 95–99

4. Malcolm AG. Mems. of Public Matters. or Record of A G Malcolm's life written by himself. Public Record Office of Northern Ireland, reference D3784/2/2. Extracts published with permission of the Deputy Keeper. Available from: https://www.ums.ac.uk/biog/mpmagm.pdf [Last accessed Jan 2022].

5. Logan JI. Records of the Medical Societies of Belfast 1822–1884. Belfast: Ulster Medical Society. 2020; Vol 1: 115. Available from: https://www.ums.ac.uk/rmsob/RMSoB%20vol%201.pdf. [Last accessed Jan 2022].

CONCERNS FOR PEOPLE WITH CYSTIC FIBROSIS (PWCF) WHEN TRAVELLING PRE COVID-19

Editor,

There are currently over 300 adult and 200 paediatric persons with cystic fibrosis (PwCF) in Northern Ireland, who attend the regional CF centres at the Belfast City Hospital and the Royal Belfast Hospital for Sick Children, respectively. A combination of a high burden of daily treatment combined with moderate to high disease severity has made travelling difficult or impractical for many PwCF, although travelling is becoming more popular for young adults with CF, who have relatively stable disease. For some PwCF, the prospect of travelling to unknown destinations may generate fear of acquiring a new respiratory infection and other concerns, as depicted in the artwork of the Front Cover of this issue of the journal, however advances in therapies including transmembrane conductance regulator (CFTR) modulators, have enabled many PwCF to consider and embark upon travel to various global destinations.[1]

The front cover of this issue of the Journal depicts "*Travelling with cystic fibrosis*", A person with cystic fibrosis' perspective of travelling with CF - Caroline Anne Moreland 2019 (with permission). The picture shows a collection of cats, which represent PwCF. The artist describes them "as odd and outside of normal society, hence the moustaches and eye-patches. Like most people, they have a desire to travel and explore the world but are limited by the issues which are represented by the thorns of the rose bush. The roses themselves are a gesture to "65 roses", the phrase used to help children pronounce "cystic fibrosis". So rather than travel, they stay at home because of restrictions, represented by the zipper."

Through a service improvement project, we examined travel-related difficulties and concerns experienced by our local CF adult population, so that we are able to further support PwCF health literacy needs, when preparing, during and post travel. To establish this baseline, we designed a self-completing, voluntary, anonymous questionnaire amongst adult PwCF attending outpatient CF clinics during the summer of 2019 (pre-COVID), to gain an insight into (i) specific concerns when travelling and (ii) the availability of

online travel advice/resource from UK CF Centres and other sources. Free text questions were used to collect respondent demographics and responses to the questions asked. The survey was conducted using the guiding code of ethics and practices established by the American Association of Public Opinion Research (AAPOR) (www.aapor.org). In addition, a *Virtual Focus Group* was held to explore the PwCF experience when travelling. The availability of published online travel guidance from CF Centres (n=25) and CF charities were also examined.

There were 68 respondents to the survey, including 31 males, 33 females and 4 respondents who did not enter their gender. Respondents who declared their age (n=63) ranged from 17 to 71 years (median = 30 years; 94% of respondents in age range 20-39 years). PwCF cited nine concerns when travelling, as listed in Table 1. The most frequently cited concern was access to affordable travel insurance and confusion with providers of such cover. Previously, it has been reported that 18% of PwCF have travelled with no insurance and 23% have travelled with insurance which did not cover CF.[2] Another common concern was the need to maintain an effective cold chain for temperature-sensitive medications, particularly DNAse, as a mucolytic agent to aid airway clearance. One PwCF was concerned about their PEG when swimming and attempted to mitigate any potential contamination from water, by applying a waterproof dressing to the PEG. Another PwCF reported damage of liquid nutrition packs during transit, negatively impacting on their holiday experience and as such has resulted in avoidance of future air travel.

Table 1: Concerns raised by people with cystic fibrosis (PwCF) realting to travel

High cost of travel insurance
Acquiring an infection on the plane or on vacation
Complaints from other passengers due to coughing
Uncertainty of another PWCF on the same flight
Medications- having enough medications for the trip, incomplete doctor's letter
Ensuring supplemental feeding supplies do not get damaged in transit
Ensuring appropriate cold chain for medications
Issues at security- detection of peg tube, transport of needles, medications
Limited space, limitations on hand luggage/space required for medications

Analysis of online travel resources for PwCF showed that 9/25 CF centres in the UK offered varied freely available online travel advice, although there was no detailed advice on the cleaning of the nebuliser when travelling. The UK CF Trust offers valuable travel advice[3] but refers PwCF back to their NHS CF healthcare team, for specific individual clinical guidance. Further valuable resources are available to address the needs of PwCF when travelling, including the British Thoracic Society's (BTS) guidelines on air travel in people with respiratory disease[4,5] and the European Cystic Fibrosis Society (ECFS) recommendations on travelling with CF.[6]

The current policy in most CF centres is that PwCF are encouraged to discuss with their CF healthcare team at clinic, their potential travel plans well in advance of the actual proposed date of travel. Such travel plans may include requirements/aspirations, for work/leisure/family and further details are sought, including intended destination, the number of hours flying required, the anticipated time away from home, facilities at their intended destination, etc. These are reconciled in conjunction with their clinical status and where appropriate, discussed with the CF multidisciplinary team, so that the PwCF is well informed and prepared for travel, when/where travel is a safe option.

In contrast, it is interesting to note differences in the perceptions of PwCF and those of healthcare professionals, in relation to travel. Previously, Hirche and colleagues[5] listed recommendations from the healthcare professional's viewpoint in an evidence-based manner, as detailed in Table 2. When the concerns of the PwCF are compared to the recommendations from the healthcare professional, complaints about in-flight coughing, acquiring an infection on the flight, another unknown PwCF on the flight and issues at security, were unique to the PwCF. Healthcare professionals listed an additional 14 CF travel-related considerations. This comparison highlights an important chasm between PwCF

Table 2: Checklist for the CF-healthcare team relating to considerations for people with cystic fibrosis when travelling (adapted from5)

Consultation with CF healthcare team • prior to travel (medical assessment, optimisation of clinical status, travel counselling) • first point of call if health-related issues encountered during holidays/travel
Flight travel & staying at high altitudes Consideration of medical safety in relation to health status and contraindications
In-flight oxygen • requirement consideration • inform airline if required
Vaccinations & anti-malarial treatments dependent on destination (i) mandatory and recommended vaccinations **(ii)** anti-malarial recommendations
Consideration of infection risks during travel and at destination • endemic infection risks • prevention of acquiring CF-relevant organisms from the environment or other PwCF • adherence to infection prevention and control measures e.g. hand washing, clean/disinfect nebulisers
Consideration of availability of CF clinical support at destination
Private travel insurance • essential to have adequate private travel and health insurance whilst travelling • awareness of reimbursement of healthcare and repatriation costs and healthcare agreements between home country and holiday destination
Documentation supplied by local CF-healthcare team & carried at all times • list of medications, dosage, medical devices, consultant and patient details • detailed medical report • chronic illness letter (for potential use as fast track in theme parks etc.)
Medications • storage temperature precautions • photosensitivity attributed to drugs • adaption of medications by healthcare team considering climate, diet, prophylaxis and circumstances • medications for prevention of salt deprivation and fluid loss • appropriate supply for duration of holidays/travel
Voltage Check for electrical compatibility and plug type in relation to medical devices
Activities Consider activities during vacations such as sports which could impact on health
Immunocompromised/organ transplant recipients Consideration of the following • increased susceptibility to travel related and opportunistic infections • drug interactions (CF-medications and travel-related medications) • safety of live vaccines and decreased vaccine efficacy

and the healthcare team and emphasises the need for good communication, to improve health literacy amongst PwCF and improve patient safety when travelling.

Travel recommendations to PwCF should be a syntheses of the concerns articulated by the PwCF, as well as recommendations from the CF healthcare team. In order to support these, we have prepared a new and novel short animation entitled "*All aboard – Travel Recommendations with Cystic Fibrosis*" [7] to help guide PwCF considering travelling.

The arrival of SARS CoV-2 in early 2020 and post-BREXIT arrangements have further transformed and confounded the travel landscape for PwCF. CF multidisciplinary teams should be aware of these patient-articulated factors that may still limit travel opportunities for those patients who are clinically fit-to-travel and should attempt to engage with the relevant stakeholders through enhanced communication to help facilitate travel arrangements for PwCF.

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CONFLICT OF INTEREST:
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AVAILABILITY OF DATA AND MATERIAL
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COMPETING INTEREST
None

REFERENCES

1. Pachas D. Not Letting CF Hold Me Back From Traveling. [monograph on the Internet]. Bethsda, MD: Cystic Fibrosis Foundation; 2021. [cited 2021 Nov 11]. Available from https://www.cff.org/community-posts/2021-08/not-letting-cf-hold-me-back-traveling. [Last accessed Jan 2022]

2. Miller R, Blanch L, Lenaghan S, Anderson A, Doe S, Bourke SJ. Travelling abroad with cystic fibrosis: Assessment of risks and healthcare requirements. *Respir Med*. 2017;125:92-3. doi: 10.1016/j.rmed.2017.01.007.

3. Cystic Fibrosis Trust. Going on holiday with cystic fibrosis. [monography on the Internet] [cited 2021 Nov 11]. Available from https://www.cysticfibrosis.org.uk/the-work-we-do/support-available/going-on-holiday. [Last accessed Jan 2022].

4. Josephs LK, Coker RK, Thomas M; BTS Air Travel Working Group; British Thoracic Society. Managing patients with stable respiratory disease planning air travel: a primary care summary of the British Thoracic Society recommendations. *Prim Care Respir J*. 2013;22(2):234-8.

5. Ahmedzai S, Balfour-Lynn IM, Bewick T, Buchdahl R, Coker RK, Cummin AR, *et al*. British Thoracic Society Standards of Care Committee. Managing passengers with stable respiratory disease planning air travel: British Thoracic Society recommendations. *Thorax*. 2011;66:Suppl 1:i1-30. doi: 10.1136/thoraxjnl-2011-200295.

6. Hirche TO, Bradley J, d'Alquen D, De Boeck K, Dembski B, Elborn JS, *et al*. European Centres of Reference Network for Cystic Fibrosis (ECORN-CF) Study Group. Travelling with cystic fibrosis: recommendations for patients and care team members. *J Cyst Fibros*. 2010;9(6):385-99.

7. Cystic Fibrosis CF Education. "All aboard. Travel recommendations for cystic fibrosis (CF). Belfast: Cystic Fibrosis CF Education; 2022 Jan 7 [cited 2021 Jan 15]. Video 1.46 min. [Last accessed Jan 2022].

INCIDENCE OF ACUTE ANGLE CLOSURE GLAUCOMA IN THE NORTHERN IRELAND DIABETIC EYE SCREENING PROGRAMME

Editor,

This project aimed to ascertain the risk of acute angle closure (AAC) after the administration of tropicamide within the Diabetic Eye Screening Programme Northern Ireland (DESPNI). DESPNI provides a regional screening service to all of those with diabetes mellitus in Northern Ireland. There are 112000 patients on the register, of these 87 000 have regular annual eye screening using fundus photography.[1] At DESPNI, mydriasis using tropicamide can improve the quality of fundus images obtained. AAC is a rare complication of mydriasis, estimated risk of 0.3–

0.03%, and is an ophthalmic emergency that might lead to permanent visual loss if left untreated.[2] During 2007-2010, of the 95265 DESPNI episodes with Tropicamide dilation, 2 cases were identified, giving the risk of 1 in 31755 and annual incidence was 0.75 cases.[3] The recommendations to DESPNI included clear instructions of AAC symptoms and emphasising the need for urgent treatment should they occur. This was after peer-to-peer education regarding AAC awareness in ophthalmic screening healthcare programme.

This audit aims to assess the incidence and management of AAC occurring within 72 hours of DESPNI attendance with tropicamide mydriasis between 01/09/2016 to 28/02/2021. A retrospective case-note review was carried out, cross referencing medical and DESPNI records, to identify relevant AAC episodes occurring within 72 hours of a DESPNI visit with mydriasis. The standards were extracted from 'Ophthalmic Services Guidance Eye Drops Instillation by Unregistered Health Care Professionals for use within NHS Ophthalmic Services'. For this current audit, 159 patients were identified as having had AAC during 01/09/2016 to 28/02/2021. Only one had AAC within 72 hours of DESPNI's tropicamide dilation and was successfully managed. Over the 54 months period of observation, 206334 patients were screening by DESPNI with a dilation rate of approximately 75%, so altogether 154750 patients were dilated. The incidence of AAC within the screening programme was calculated to be 1 event per 154750 episodes. The annual incidence of angle closure was 0.2 cases per year.

This improves our ability to inform patients of the low risk of AAC within DESPNI. The AAC incidence within DESPNI was calculated to be 1 event per 154750 episodes, this is less than reported in other publications such as the population-based Rotterdam Study, where AAC incidence was 3 in 10000 following tropicamide mydriasis. [4] We advocate the provision of clear instructions to patients in diabetic screening regarding access to emergency ophthalmic care following dilation to prevent visual loss in this rare event.

The authors declare no conflict of interest.
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REFERENCES

1. HSC Public Health Agency. Northern Ireland Diabetic Eye Screening Programme Annual Report. **2016-2017.** [monograph on the Internet]. Belfast: HSC Public Health Agency; 2018 Dec 10 [cited 2021 Sep 20]. Available from: https://www.publichealth.hscni.net/publications/diabetic-eye-screening-programme-annual-report-2016-2017. [Last accessed Jan 2022].
2. Klein R, Klein BE, Neider MW, Hubbard LD, Meuer SM, Brothers RJ. Diabetic retinopathy as detected using ophthalmoscopy, a nonmydriatic camera and a standard fundus camera. *Ophthalmol*. 1985**;92(4):**485-91.
3. Lagan MA, O'Gallagher MK, Johnston SE, Hart PM. Angle closure glaucoma in the Northern Ireland Diabetic Retinopathy Screening Programme. *Eye (Lond)*. 2016;**30(8):**1091-3.
4. Wolfs RC, Grobbee DE, Hofman A, De Jong PT. Risk of acute angle-closure glaucoma after diagnostic mydriasis in nonselected subjects: the Rotterdam Study. *Invest Ophthalmol Visual Sci*. 1997;**38(12):**2683-7.

STROKE, COVID-19 INFECTION OR HERPES SIMPLEX ENCEPHALITIS: A DIAGNOSTIC DILEMMA

Editor,

We present the challenging case of a 71 year-old healthy woman who presented, during the first wave of the Covid-19 pandemic, with a two day history of headaches, fever, confusion and expressive dysphasia. She had no new respiratory complaints. Her background history was not contributory. She was admitted to a Covid-19 isolation unit and a nasopharyngeal swab for viral PCR was sent to test for SARS-CoV-2. Her examination was notable for expressive and receptive dysphasia, vertical gaze nystagmus, right upper limb pronator drift and a positive Babinski's sign on the right side. She was unable to follow more than one stage commands and exhibited perseverance. There was some fluctuation in her clinical signs initially. She was pyrexial at 37.9 degrees but was otherwise haemodynamically stable.

Initial investigations showed a normal serum WCC and CRP of 19.0. Typical laboratory findings of Covid-19 infection such as lymphopaenia, raised ferritin, deranged liver function tests and raised D-Dimer were absent. An urgent CT brain was completed which showed no acute abnormalities. At this time viral PCR for SARS-CoV-2 returned negative. A lumbar puncture was performed which showed CSF containing WBC 396 per microlitre (differentiation - 87% lymphocytes and 13% polymorphs). The CSF gram stain was negative, glucose was 5.2 mmol/L and protein was 1.12 g/L. Herpes simplex virus 1 was detected on viral PCR. MRI brain showed left temporal and posterior insular oedema with cortical effacement without restriction on diffusion weighted images. (figure).

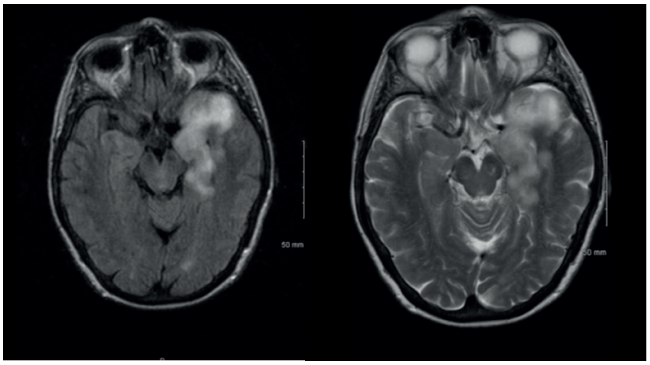

Figure 1.
MRI Brain demonstrating left temporal and posterior insular oedema with cortical effacement without restriction on diffusion weighted imaging.

From the outset we maintained a broad differential. Given the presenting features, stroke, encephalomeningitis and Covid-19 infection were at the forefront of our differential. She was empirically treated with IV acyclovir, ceftriaxone and dexamethasone while awaiting results of lumbar puncture. Following diagnosis she continued on acyclovir alone. This patient gradually recovered with no residual symptoms although she reported retrograde amnesia of her initial presentation. Follow up MRI showed a resolving process.

Discussion

Herpes Simplex virus (HSV) is responsible for 19% of cases of infectious encephalitis.[1] It represents significant morbidity and mortality to patients with a one year mortality rate of 14%.[2] Typically, patients present with symptoms of fever, headache and confusion although speech disturbance can be seen in 57% and focal neurological deficit in 26% of cases.[3] Encephalitis is a known mimic of stroke and atypical presentations can often be misdiagnosed. In some cases this has led to inappropriate treatment with alteplase and in others misdiagnosis can lead to delay in initiating appropriate treatment.[4]

The emergence of Covid-19 has further confounded this area. Neurological manifestations of Covid-19 can been seen in up to 25% of patients.[5] On MRI, unilateral medial temporal lobe oedema, a recognised finding in HSV encephalitis, has been demonstrated in patients with Covid-19 in the absence of HSV.[6] This overlap in features risk delay in initiation of correct treatment for patients.

We feel this case is of particular interest as it highlights the importance of maintaining an open mind when managing a patient who has an atypical combination of symptoms particularly in the context of the current pandemic.

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REFERENCES

1. Granerod J, Ambrose HE, Davies NW, Clewley JP, Walsh AL, Morgan D, UK Health Protection Agency (HPA) Aetiology of Encephalitis Study Group, *et al*. Causes of encephalitis and differences in their clinical presentations in England: a multicentre, population-based prospective study. *Lancet Infect Dis*. 2010;10(12):835-44.
2. Hjalmarsson A, Blomqvist P, Sköldenberg B. Herpes simplex encephalitis in Sweden, 1990-2001: incidence, morbidity, and mortality. *Clin Infect Dis*. 2007;45(7):875-80.
3. Sili U, Kaya A, Mert A, Group HSVES. Herpes simplex virus encephalitis: clinical manifestations, diagnosis and outcome in 106 adult patients. J Clin Virol 2014;60:112-118.
4. Shalchi Z, Bennett A, Hargroves D, Nash J. Diagnostic delay in a case of herpes simplex encephalitis. *BMJ Case Rep*. 2009;2009:bcr12.2008.1350. doi: 10.1136/bcr.12.2008.1350. Asadi-Pooya AA, Simani L. Central nervous system manifestations of COVID-19: A systematic review. *J Neurol Sci*. 2020;413:116832. doi: 10.1016/j.jns.2020.116832. Kremer S, Lersy F, de Sèze J, Ferré JC, Maamar A, Carsin-Nicol B, *et al*. Brain MRI findings in severe COVID-19: a retrospective observational study. *Radiol*. 2020; 297(2): E242-E251. doi: 10.1148/radiol.2020202222.

LARYNGOTRACHEOBRONCHITIS, CROUP, AN UNUSUAL PRESENTATION OF SARS-COV-2

Editor

Laryngotracheobronchitis or croup, whilst common in childhood, is rare in adults. We present an unusual clinical presentation of infection with Sars-COV-2, COVID-19 Laryngotracheobronchitis.

A 52-year-old female presented to the Emergency Department with a three day history of progressive fatigue, hoarseness and dysphagia. On examination she was sitting forward, breathing quietly, aphonic and drooling. She had mild bilateral cervical lymphandenopathy. Flexible nasendoscopy showed mild supraglottic oedema and erythema, but no airway compromise. Chest xray demonstrated "steeple sign" (Figure 1) indicative of laryngotracheobronchitis or "croup."

She had a mild inflammatory response demonstrated by a

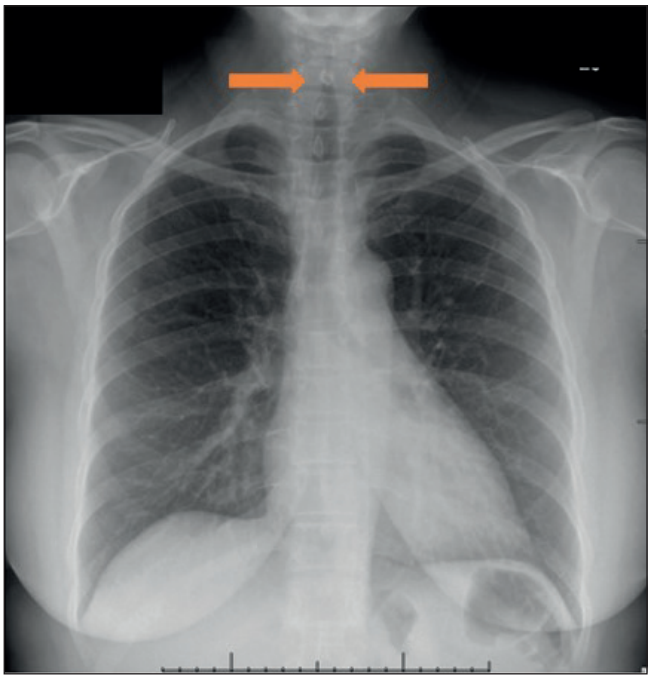

Figure 1.
Erect Chest X-ray of the patient demonstrating the typical "steeple sign associated with laryngotracheobronchitis

C-Reactive Protein of 15mg/L. There were no symptoms to necessitate a COVID-19 test had she not attended hospital, however her polymerase chain reaction (PCR) for SARS-CoV-2 resulted positive, with viral PCR for Influenza A & B, and Respiratory Syncytial Virus (RSV) all negative. The presumed diagnosis was of COVID-19 Laryngotracheobronchitis. Treatment was supportive, in the form of intravenous fluids, humidified oxygen and intravenous

corticosteroids to reduce airway oedema. Following 24 hours the patient improved clinically, and flexible nasoendoscopy revealed resolution of supraglottic oedema. The patient was discharged with a five day course of oral dexamethasone.

Laryngotracheobronchitis, commonly referred to as croup, is an upper respiratory tract infection, almost exclusively seen in the paediatric population. It commonly presents with fever, "barking" cough, stridor, dyspnoea, and hoarseness. Adult croup is more severe than in the paediatric cohort, and often requires aggressive treatment and longer hospital stays[1]. Direct evidence of oedema, and the typical "steeple sign" feature on x-ray, which represents subglottic narrowing, is more commonly found in adults[1]. The most common pathogen amongst children is Parainfluenza virus type-1, however RSV and adenovirus are also commonly isolated[2]. In adults culprit organisms leading to croup include Parainfluenza, Haemophilus influenziae, Influenza, Streptococcus, and RSV[1]. Mainstay therapy is guided by severity of symptoms. Humidified oxygen, corticosteroids and nebulised adrenaline are all recommended in moderate to severe croup in children. In adults there are no formal recommended treatments, however all reported cases have used a combination of treatments recommended in paediatric croup.

COVID-19 infection, caused by SARS-CoV-2 virus has infected over 200 million people, resulting in over 4 million deaths worldwide to date. The majority of healthy individuals are thought to remain asymptomatic, however those presenting with symptoms related to COVID-19 typically experience fever, cough, and loss of taste and smell. In more severe cases respiratory compromise may occur, requiring invasive respiratory support. There is very little evidence in the literature of upper airway oedema related to infection with COVID-19, with only 4 reports of croup in COVID-19 positive children[3, 4]. To date there are only two documented cases of COVID-19 related laryngotracheobronchitis in adults[5]. Despite the relatively indolent clinical course of the patient herein described, timely diagnosis and early intervention could prove to be critical in preventing airway compromise in patients presenting with COVID-19 infection of the upper respiratory tract.

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REFERENCES

1. Patel JJ, Kitchin E, Pfeifer K. A narrowing diagnosis: a rare cause of adult croup and literature review. *Case Rep Crit Care*. 2017;**2017**:9870762. doi: 10.1155/2017/9870762.
2. Zoorob R, Sidani M, Murray J. Croup: an overview. *Am Fam Physician*. 2011;**83(9)**:1067-73.
3. Venn AM, Schmidt JM, Mullan PC. Pediatric croup with COVID-19. *Am J Emerg Med*. 2021;**43(1)**:287 .e1-287.e3. doi: 10.1016/j.ajem.2020.09.034.
4. Pitstick CE, Rodriguez KM, Smith AC, Herman HK, Hays JF, Nash CB. A curious case of croup: laryngotracheitis caused by COVID-19. *Pediatric*. 2021;**147(1)**:e2020012179. doi: 10.1542/peds.2020-012179.
5. Oliver CM, Campbell M, Dulan O, Hamilton N, Birchall M. Appearance and management of COVID-19 laryngo-tracheitis: two case reports [Version 2; Peer reviewed: 2 approved]. *F1000Res*. 2020;**9**:310

MELANOMA: MORE THAN SKIN DEEP

Editor,

Melanoma is the 5th most common cancer in the UK, with approximately 40 people receiving a new diagnosis daily. It is deemed the most serious of skin cancers due to its propensity to metastasise widely, which can affect all organ systems including the gastrointestinal tract (GIT). We present three cases of metastatic melanoma who presented with gastrointestinal (GI) symptoms within a three month period to a tertiary centre.

A 72 year old man had a previous history of cutaneous melanoma, treated with wide local excision, three years prior to the current presentation. He presented with melaena, symptomatic anaemia and abnormalities of his small bowel were noted on CT abdomen. Upper GI endoscopy identified multiple small black tumour deposits (Figure 1A). Follow up MR enterography confirmed several small bowel

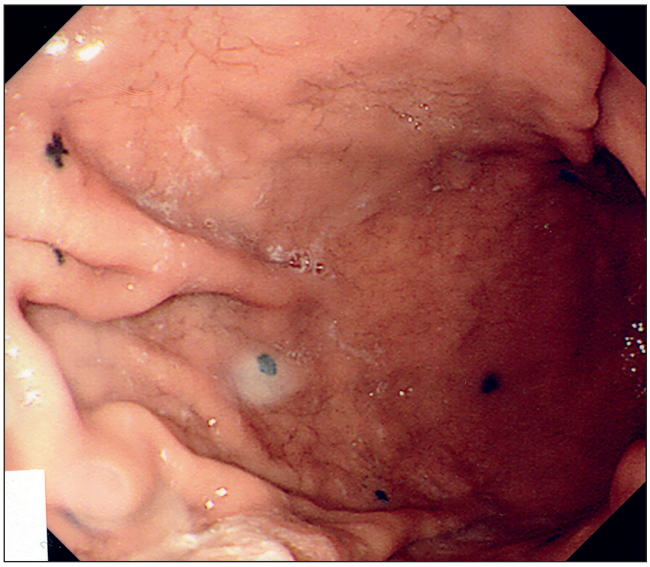

Figure 1A Multiple small black deposits of metastatic melanoma in the gastric mucosa at endoscopy (Patient 1)

lesions which were suspicious for metastatic disease. He subsequently developed small bowel obstruction secondary to intussusception and proceeded to have a small bowel resection. Three separate tumours were removed and histology confirmed metastatic melanoma.

A 66 year old man was referred to the GI outpatient service with symptomatic anaemia, intermittent change in bowel habit and weight loss. CT imaging identified an abnormal gallbladder mass. Subsequent MRI confirmed a 5.6cm mass arising from the gallbladder. Following laparotomy this was identified as a malignant melanoma. Whereas primary gallbladder mucosal melanomas have been reported they are extremely rare, and a metastasis was considered more likely.

A 75 year old man gave a history of melanoma removed by wide local excision from his anterior abdominal wall 15 years previously. He presented to the Emergency Department with melaena and iron deficiency anaemia was noted. Upper GI endoscopy was normal. CT imaging revealed thickening at the duodeno-jejunal junction. At enteroscopy an ulcerated tumour

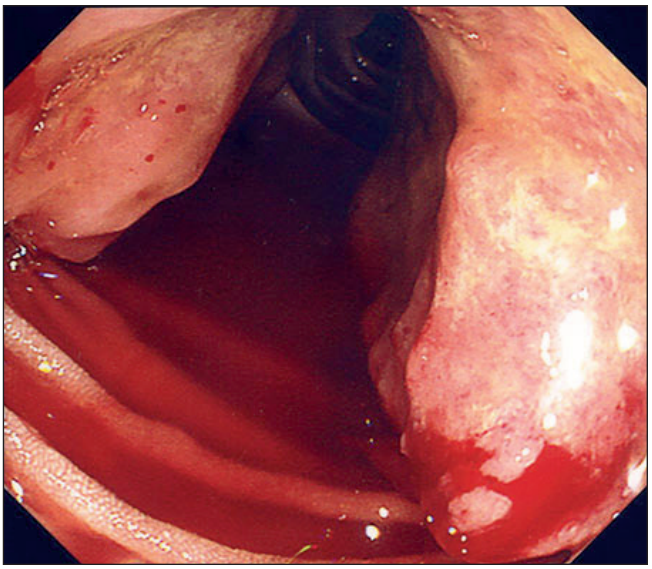

Figure 1B Metatastic (amelanotic) tumour deposit in the third part of duodenum with contact bleeding (Patient 3)

was noted in the distal duodenum, biopsies of which identified malignant melanoma (Figure 1B). He later underwent small bowel resection, with histology confirming metastatic melanoma with clear resection margins.

Discussion

Cutaneous melanoma can metastasize to the GI tract in up to 60%[1] of cases, although symptoms only occur in approximately 1-5% of cases.[2] Our three patients demonstrate that when GI symptoms do occur, they are similar to those expected of primary GI tumours.

As symptoms are often insidious, there should be a high index of suspicion for metastatic recurrence in patients who have a previous diagnosis of melanoma, regardless of the timeframe, as demonstrated by the 15 year interval in our third patient.

Upper GI endoscopy is a first line investigation if GI malignancy is suspected. However since up to 58%[3] of metastases occur in the jejunum and ileum these may initially go undetected, presenting a diagnostic challenge. In addition, standard CT imaging has been reported to have a limited sensitivity (60-70%[1]) for detecting these metastatic lesions.

Endoscopy may identify nodules, ulcers or polypoidal lesions which may be amelanotic, again confounding the endoscopic diagnosis, prior to histological identification.

The above patients highlight the importance of a strong clinical suspicion in patients with a previous history of melanoma who present with anaemia or abdominal symptoms.

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REFERENCES

1. Prakoso E, Selby WS. Capsule endoscopy for management of small bowel melanoma - is it time yet? *Gastroenterol Hepatol (N.Y.)*. 2012;**8(10)**:694-5.
2. Kohoutova D, Worku D, Aziz H, Teare J, Weir J, Larkin J. Malignant melanoma of the gastrointestinal tract: symptoms, diagnosis, and current treatment options. *Cells*. 2021;**10(2)**:327. doi: 10.3390/foods10020327.
3. Dasgupta T, Brasfield R. Metastatic melanoma. A clinicopathological study. *Cancer* 1964; **17(10)**:1323-39.

A QUALITATIVE EVALUATION OF INFOGRAPHICS AND ITS USES IN HEALTHCARE COMMUNICATION

Keywords: *Diabetes, Graphics, Healthcare, Infographics.*

Editor,

Infographics are graphic visual representations of data, knowledge or information that are meant to deliver information quickly and clearly. Using infographics, complex information can be easily communicated to the general audience through a variety of platforms, including social media, websites, newspapers, poster designs, televisions and film advertisements. Recently, infographics have been proven to be incredibly effective in informing patients to better understand the procedures and pathological conditions involved in their diseases. Most of the Healthcare industries and professionals engage in infographics to explicitly communicate medical information to their patients. The goal of this research is to emphasize the importance of infographics in information design on type 2 Diabetes in order to provide adequate health information to patients, thereby improving the patients' decision-making abilities and the practitioner-patient relationship. The infographics were discussed with endocrinologist, Dr. Mahavir Singh of the National Institute of Medical Science (NIMS), Jaipur, India.

A total of 200 people from Jaipur's urban and rural hospitals participated in the study. Government Primary Hospitals and Private Hospitals were the target areas for the sample data collection. Visiting patients, patients admitted to hospitals, and their guardians were among the participants, who were of both the genders and the age ranged from 20 to 90 years (Figure 1). For this investigation, a questionnaire with two sections was constructed and used. The demographic information is collected in the first section of the questionnaire (name, gender, age, department and nationality). The second segment includes ten questions that are graded on a five-point Likert scale. The Likert scales for the questions were (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, and (5) Strongly Agree. In this research, data was gathered utilizing a Purposive Sampling approach and Quantitative Research Methodology (Figure 1). An infographic design was also mentioned, which incorporates Type 2 diabetic information (Figure 3).

After the survey, the data were analyzed and the following graph was developed based on the research questions as shown in figure 1 and 2.

From the studies, we have discovered that data containing visuals is more adequate and comprehensible than facts containing only textual content. We additionally located that few of the patients who are not able to read the text supplied within the infographics can apprehend the visuals very easily. We would like to conclude that if we exhibit infographic information to the patients, it will help them in better understanding and provide comprehensible information concerning any disease.

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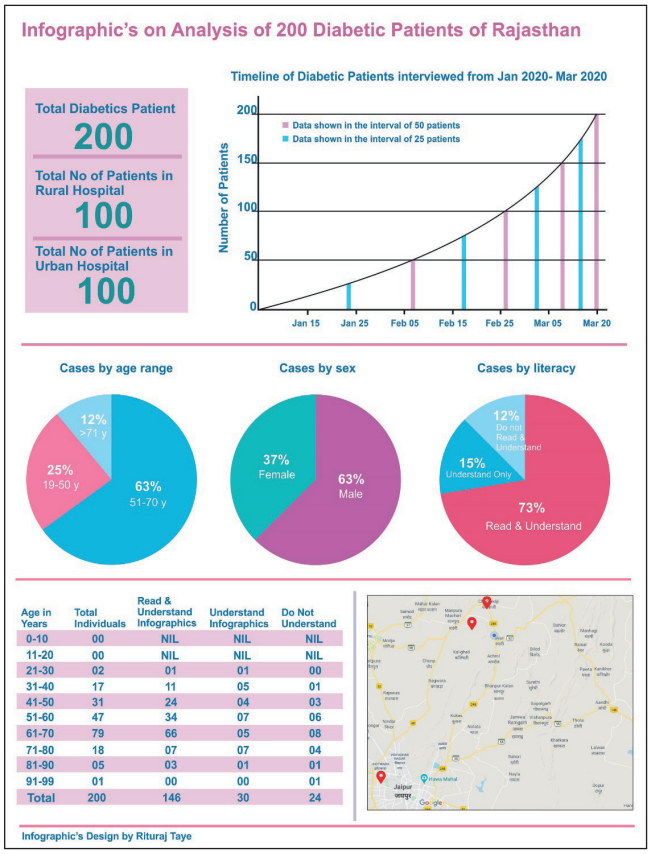
Figure 1: Detailed infographics of 200 Diabetic patients showcasing the age, gender & literacy rate factor.



REFERENCES:

1. Ocampo M. Why Infographics are Important? [Internet]. *Naldz Graphics*. ca 2011 [cited 2019 Nov 7]. Available from: http://www.naldzgraphics.net/tips/reasons-why-infographics-are-important/ [Last accessed Jan 2022].
2. Thomas LC. Think visual. *J Web Librariansh*. 2012; 6(4), 321–4. doi: 10.1080/19322909.2012.729388.
3. Lankow J, Ritchie J, Crooks R. Infographics: The power of visual storytelling. NewYork: John Wiley & Sons; 2012.

Figure 3: Infographic design containing information of Type 2 diabetes.

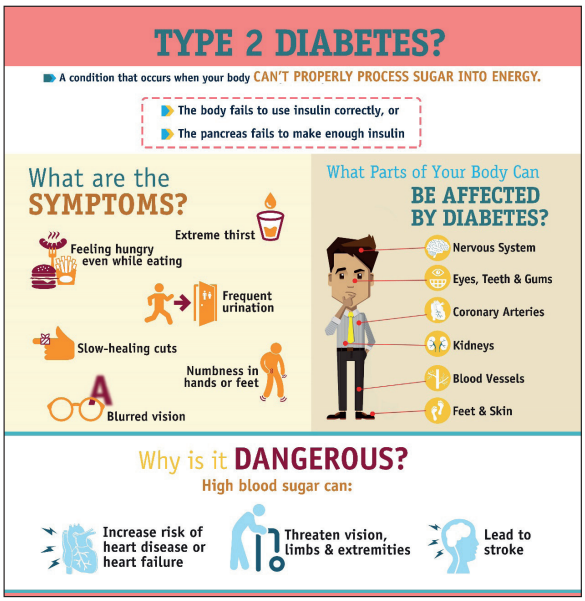


Figure 2: Bar graph representing the 10 questions (Q) from the survey details of 200 diabetic patients based on Likert scales.