Saturday, June 10, 2017

8:30 - 9:25 WS #94: Teledermatology Case Reports
9:35 - 10:30 WS #106: Teledermatology Case Reports (Repeated)
Teledermatology

Case reports

Adjunct Associate Professor Amanda Oakley, University of Auckland
Waikato DHB
Professor Peter Soyer, University of Queensland
Princess Alexandra Hospital
My conflicts

• I diagnose hundreds of cases each week
• Consultant for MoleMap NZ
• Director of NZ Teledermatology
• Editor in chief DermNet New Zealand
  o Sponsored by Pharma
Outline

• Pathways to teledermatology - AO
• Impact of images on histopathological diagnosis – PS
• Cases – alternating AO and PS
Teledermatology / virtual dermatology

- Access to specialist dermatological knowledge by means of telecommunications and information technology
- Requires high quality patient info + images
Teledermatoscopy – digital dermatoscopy
# Teledermatology

## Benefits

- Patient gets Specialist care
  - Improves access, equitable
- Faster, more convenient
  - 75% fewer in-person consults
- Reduces consultation costs
  - Patient, organisation
- Reduces GP consultations
  - Fewer pharmaceuticals
  - Fewer investigations

## Disadvantages

- Shifts burden to primary care
  - Imaging, on-going patient care
- Remains a burden to specialist
  - Requires funding
  - Requires timetabling
- Rarely incorporated in EMR
  - Hospital, GP
- DHBs struggle to understand it
  - Lack of funding stream
Video conferencing
Video Consultations at Waikato

- 1995–2003:
  - Taumarunui, Taupo, Rotorua
  - 800 consultations
- 2010–2013:
  - Taranaki DHB
  - 300 consultations
Case 1: 1995

- Taumarunui company director in his 50s
- Too busy to go to the doctor before now
- Asymptomatic nodule growing over the last year or two
- Diagnosis?
Case 1: 1995

- Nodular melanoma
- Easy diagnosis
- Referred for surgery


Melanoma--diagnosis by telemedicine.

Oakley A¹, Duffill M, Astwood D, Reeve P.
Case 2: 1998

- Pregnant woman in Rotorua
- 2 month h/o spreading rash
- GP describes pustules, lack of response to topical steroid
- Diagnosis?
Case 2: 1998

- Generalised pustular psoriasis of pregnancy
- Rx systemic steroids + referral to obstetrician
- Normal delivery at 36 weeks
- Slow recovery as steroids weaned

**DIAGNOSIS OF RARE DERMATOLOGICAL COMPLICATION OF PREGNANCY BY TELEMEDICINE**

by NICK BRADFORD FRNZCGP, AMANDA OAKLEY FRACP, DERYCK PILKINGTON and RAEWYN TAYLOR, MIDWIFE

In 1998 two doctors at the Taupo Health Centre, namely Dr Peter Flesch and myself, were involved in a Teledermatology research project in association with Waikato Hospital Dermatology Department. For the teledermatology sessions digital images were taken using a Kodak DC 210 Digital Camera with a resolution of 1.2 Megapixels, as well as real time teledermatology using both a fixed and mobile video camera system linking through VTEL Software and an ISDN telephone line to Waikato Dermatology.

During the year, a 26 year old patient presented at 29 weeks in her second pregnancy with a rash. This was initially a slightly itchy rash of annular plaques with superficial white pustules at the leading edge, occurring first on the abdomen and upper chest and was symmetrical. A week later the rash had become more florid. It had spread to the abdomen, it was more painful than itchy and there were small white lesions inside the buccal mucosa. By the following day, the arms and legs were involved proximally, the hands were spared at that stage, but the rash later spread to the hands. At that stage I took digital photographs of the rash and sent them as attachments by electronic mail to the dermatologist (AO), who felt the diagnosis could be acute generalised exanthematous pustular dermatitis (AGEP). The diagnosis however was not certain even after a conventional consultation at Waikato Hospital. The rash continued to extend, becoming more painful. With the patient's permission further digital photographs were sent to Amanda Oakley for circulation to Rederm, an Internet mailing list for dermatologists. Within two days there were three replies from dermatologists, two in the United States and one in Europe who had seen a similar rash previously. Their diagnosis was impetigo herpetiformis, which was soon confirmed by biopsy.
## Video consultation

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Direct to patient</td>
<td>• No full skin examination</td>
</tr>
<tr>
<td>• Can be as good as in-person consultation</td>
<td>• Doesn’t save specialist time</td>
</tr>
<tr>
<td>• Great for follow-up</td>
<td>• Doesn’t reduce wait-lists</td>
</tr>
<tr>
<td>• Saves patient travel</td>
<td></td>
</tr>
</tbody>
</table>
2016: weekly teleconferences

- Registrar training + CPD
- Case presentations
- MDMs – Taranaki, Christchurch
Private teledermatoscopy
MoleMap NZ (2015)

- Patients: 192,327
- Patient visits: 345,746
- Bodyshots: 3,175,683
- Lesions: 2,786,418
- Lesion visits: 6,235,264
- Lesion Images: 11,821,615
- Visits in last year: 36,517
Mole mapping procedure

• Nurse takes history
• Full skin examination
• Whole body imaging
• Imaging of lesions of concern
  • To patient
  • To referring health professional
  • To melanographer
Magnify specific lesions
Review dermoscopy images
# Private teledermatoscopy service

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patients may self-refer</td>
<td>• Usually self-funded</td>
</tr>
<tr>
<td>• Full skin examination by trained nurse</td>
<td>• Expensive</td>
</tr>
<tr>
<td>• Ideal if multiple naevi</td>
<td>• Skin examination is not by dermatologist</td>
</tr>
<tr>
<td>o Total body photography</td>
<td>• Unnecessary for low-risk patients</td>
</tr>
<tr>
<td>o Annual sequential dermoscopic imaging</td>
<td>• Low uptake of repeat screening</td>
</tr>
<tr>
<td>• reduces unnecessary excisions in “worried well”</td>
<td></td>
</tr>
</tbody>
</table>

- Usually self-funded
- Expensive
- Skin examination is not by dermatologist
- Unnecessary for low-risk patients
- Low uptake of repeat screening
Virtual lesion clinic
Waikato virtual lesion clinic

- Teledermatoscopy service 2010–2016
- Imaging sites
  - Hamilton, Thames, Te Kuiti
- 5718 visits, 9782 lesions (Dec 2016)
VLC: melanomas

- 605 excisions → 302 melanomas
- NNT = 2
- B:M = 1
- MM:MIS = 103:199 = 0.3
Case 3: 2011

- 75 yo male
- Referred re black papule on forehead
- ?melanoma
- ?Diagnosis
Case 3: 2011

- Diagnosis
Case 3: 2011

- Seborrhoeic keratosis
- No reason for concern
Case 3: 2011

• Nurse asked, do you have any other lesions you’d like me to look at?
• Response, no.
• Nurse, shall I take a look at your back while you’re here?
Case 3: 2011

- Diagnosis?
Case 3: 2011

• Diagnosis?
Case 3: 2011

- Diagnosis?
Case 3: 2011

- Nodular melanoma
- Breslow thickness 20 mm
- Excised
- Patient died 14 months later
Waikato VLC

Benefits

• High quality history, images
• Accurate diagnoses
• Reduces wait time
  o Consultation
  o Surgery
• Reduces costs

Disadvantages

• Patient travel
• Communication difficulties
• Long wait times
Email

Dear Amanda,

Sorry to bother you again today—Anthony is away and I've been booked a lot of new patients to see.

This is a man with a rash I can't really see—I've attached photos and below is my consultation notes:

Rash started 6/3 after finishing AMOX tablets for Syphilis. Data on pictures negative—need to look at锐males on digital and plantar surfaces of both feet where he would wear their flip-flops.

Red and itchy—very itchy

Affected on arms & elbows, knees, calves, hands and feet but not in areas of boots, small nail patches.

Initially a dermatologist thought it was allergic contact dermatitis until they saw the rash on his hands—nerve endings make it go away but does come back on occasion.

Otherwise well, always had 'sensitive skin' which itschy easily.

Regards,

Michael

MH
Registrar audit 2016

- 3 month review of 461 calls → 100 emails
  - GPs, hospital doctors
- Photographs adequate in 85%
  - Reduced OP appts by 67%
- Response time ~ 4 hours

Advice given: 87/100
Non-urgent review: 13/100
Urgent review: 20/100
Urgent review: 20/100
Urgent review: 20/100
Audit identified problems

- Lack of history – e.g., phone call several days earlier
- Images could be improved
- Consent status unknown
Audit led to a protocol

- Dermatology registrar receives phone call
- Asks caller for email address
- Sends caller the protocol
- Caller emails with completed template + images
- Registrar forwards to consultant of the day
- They discuss what to do
- Registrar phones or emails the caller with a plan
Images (SEE ATTACHED pictures and consent)
Obtain written consent for clinical purposes, education and publication as a routine. Explain that you are going to email it to Dermatology. Use Medical Photography’s blue form — read the front page of the pad of forms. Whenever practical, get a medical photographer to take the photos and send them to dermatology. However, we will accept other photographs taken by health professional, patient or relative.
You can use a digital camera or cell phone but make sure you comply with WDHB image policy.
• ~ 2000 x 1500 px JPG images
• Use flash
• Ensure the background is neutral coloured (eg surgical green, blue or grey), and plain
• Remove extraneous items (jewellery, dirty dressings etc)
• Take several images showing location or distribution shots (upper trunk, 2 legs, entire face etc) and several close-ups to demonstrate morphology (at a distance of 20 cm).
• Add images of both sides of the entire consent form
Case 4: June 2017

- Medical registrar called dermatology registrar
- Emailed completed template + images
- Derm reg + consultant discussed the case
Case 4: June 2017

Not a full in patient

Skin lesions:
- Date of onset/duration: 1/6/17
- Whether single or multiple: Multiple:
- Location/s on body: Forehead and Right and Left lateral face
- Changes in size, shape, colour: Raised, red, non-blanching
- Any bleeding and/or ulceration: Isolated left groin open lesion (underneath skin flap) - no discharge or cellulitis, no pain or redness around - has now been dressed
- Symptoms: Tender and itchy superficially, and even more tender to palpation
- Any personal and/or family history of skin cancers: Nil
- Other risk factors, ie excessive sun exposure, fair skin, large number of naevi, immunosuppression, outdoor occupation etc.
- Repeat and recent medications: Atorvastatin 40mg, Omeprazole 40mg, Citalopram 40mg, Diltiazem CD 180mg, Aspirin EC 100mg (all medications long term). Given IV Ceftriaxone on admission to cover for sepsis of unclear source (rash may have appeared after ceftriaxone)
- Other medical conditions: IHD with stents (20 years ago), HTN, Dyslipidemia, GORD, Pre-diabetes
Case 4: June 2017

**Inflammatory dermatosis:**
- Date of onset/duration: 1/5/17
- Location/s on the body: Face and lateral face (same as above), GP noted bilateral cubital fossa and left thigh rash 2/52 ago. Seen by GP and told it was eczema. No treatment offered, but that rash has now resolved.
- Symptoms: Tender and itchy, increased tenderness to palpation.
- Previous treatment for this condition and its response to medications: None
- Personal and family history of skin disease: None
- Relevant medical history (see above)
- Known allergies: NKDA
- Repeat and recent medications (see above)
- Active problem list: 76 year old patient presented to gen med with 5/7 history of increasing weakness, lethargy, generalized muscle aches. Noted to be febrile 38.5C with BP 95/50, HR 105bpm. Given IV Ceftriaxone, however septic screen negative. Viral swabs sent.
Case 4: June 2017

Consent form
I consent to participating in Waikato DHB photography / filming to be used for:

☐ medical teaching in all media

☐ promotional display and general health publications related to health or Waikato DHB activities, e.g. Annual Report, health career promotions

☐ Waikato DHB website

☐ video and TV promotions

☐ Facebook / social media

☐ specific project (as outlined below)

☐ other (e.g. NZ wide media) [Handwritten: Pictures / For Dermatology Registration Review]

I understand that all of these uses may be seen by the general public. I understand that Waikato DHB will retain ownership of the photographic / video images.
Case 4: June 2017

NO FLASH
Case 4: June 2017

- Febrile + tender rash (1 day)
- Ulcer in groin
- (duration unknown)
- Rash cubital fossae
  GP dx eczema
  (2 weeks ago, resolved)
- Diagnosis?
Case 4: June 2017

- We didn’t have a clue
- Went to ward
- Patient told us she had bullous pemphigoid for 2 years, tx discontinued 6 months ago
- Blisters noted right forearm + groin
- Bullous pemphigoid diagnosed
- Tx advised
Lessons

For effective teledermatology, we require:

- Excellent history
- Excellent images

Another patient with similar ulcer, blistering.
Multimedia messaging service

When urgent care needed
Hi Dr Oakley
Can you kindly advise about the rash on the back treated with permethrine 5 days ago still very itchy few dots of blood on the dressing
Rash only on the back had for about 10 days in total
Pt feel good otherwise
A febrile

Pityriasis alba | DermNet New Zealand
Pityriasis alba (dry white patches).
Authoritative facts about the skin from DermNet New Zealand.
www.dermnetnz.org
http://www.dermnetnz.org/topics/pityriasis-alba/
# Social media consultation

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>Unstructured</td>
</tr>
<tr>
<td>Rapid response</td>
<td>Undocumented</td>
</tr>
<tr>
<td>Inexpensive</td>
<td>Intrusive</td>
</tr>
<tr>
<td>Reduce referrals</td>
<td>No holiday relief</td>
</tr>
<tr>
<td></td>
<td>May be insecure</td>
</tr>
</tbody>
</table>
Welcome to New Zealand Teledermatology

News: 10 April 2016

New Zealand Teledermatology is proud to announce that its specialist dermatologists have conducted more than 1000 consultations with 74 referring health practitioners. In March 2016, average response time was under 4 hours. Contact us if you’d like to join our network!

What is New Zealand Teledermatology?

New Zealand Teledermatology provides dermatology services to health providers in New Zealand via a store-and-forward telemedicine network (Collegium Teledussus).

Established in March 2015, New Zealand Teledermatology contracts with GP organisations, District Health Boards and other healthcare providers in New Zealand that require clinical advice from a dermatologist. For example:

- For diagnosis where this is uncertain
- For triage prior to referral to face-to-face service
- For tips regarding investigations or management

The aims of New Zealand Teledermatology

The aims of New Zealand Teledermatology are:

- To provide a clinical resource for General Practitioners and other health practitioners in New Zealand in support of diagnosis and management of skin diseases in their patients
- To employ dermatologists and, as appropriate, other specialists that are vocationally registered by the Medical Council of New Zealand
- To endeavour to promptly respond to requests for advice from our clients
- To ensure confidentiality, privacy and security of consultations
- To adhere to the recommendations of the Medical Council of New Zealand regarding telemedical activities
- To adhere to other national or regional telehealth guidelines

We invite District Health Boards, PHOs, Integrated Health Centres, Elderly care organisations, institutions, and individual General Practitioners in New Zealand to contact us if they are interested in establishing a teledermatology contract.

Please note, New Zealand Teledermatology does not provide a direct-to-patient consultation service. Please use your own General Practitioner or other Healthcare professional to find out how you can access a dermatologist. New Zealand Dermatologists are listed on the New Zealand Dermatological Society’s website.

For further information about skin diseases and their treatments, refer to DermNet New Zealand at www.dermnetnz.org.
Collegium Telemedicus platform

• Secure browser-based telemedicine system
• Designed for international teleconsultations
• Specialists have holiday option
• Built-in performance monitoring, quality assurance, progress reporting
New Zealand Teledermatology

- 144 active referrers from 92 clinics
  - 1–187 referrals
  - 23 have each referred >20 cases
Time to first response: avg 4 hr
New Zealand Teledermatology

• 2073 cases completed since June 2013 (4 June 2017)
  o 10,535 messages
  o 8,590 attachments
    • Avg size 1.1 MB
    • File storage 9.7 GB
Quality varies ...

Medical photographer

GP + cell phone
Case 4: May 2017

1. CHIEF COMPLAINT
   New mole on right hand 2 months

4. EXAMINATION
   4a. DISTRIBUTION
       I was wondering if we could do a punch biopsy as an 8mm punch would give 2 to 3 mm margins and ensure I got to the subcutaneous fat
   4b. MORPHOLOGY
       Dermoscopically: radial lines in places and peripheral dots in others

5. WORKING DIAGNOSIS
   Melanocytic ? Reed naevus. However I am inclined to excise given new lesion in an adult in her 60s

7. CURRENT MANAGEMENT / TREATMENT
Case 4: May 2017
Case 4: May 2017

• Diagnosis?
Date: 23-May-2017 18:57:32  
From: Dr Amanda Oakley  
Message type: Response - to Dr Mark Taylor  

Text: Hi, the little black spot is subcorneal haemorrhage and will be gone in a couple of weeks. I can see why you thought Reed naevus, but it’s the wrong colour and quite typical of subcorneal haemorrhage. I suspect the lesion 2 months ago was another similar spot (perhaps the one that is now a scab).
Case 4: May 2017

- Subcorneal haemorrhage
- Saved referral
- Saved biopsy
- Reassured the patient
Case 5 age 2: May 2017

• Diagnosis?
Case 5 age 2: May 2017

- Combined naevus
- Congenital or congenital-type (tardive) naevus + blue naevus
## NZ Teledermatology consultations

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit for purpose</td>
<td>To date, minimal funding</td>
</tr>
<tr>
<td>Easy</td>
<td>Non-compliant</td>
</tr>
<tr>
<td>Rapid response</td>
<td>Not part of GP EMR</td>
</tr>
<tr>
<td>Inexpensive</td>
<td>• Must copy PDF record</td>
</tr>
<tr>
<td>Reduce referrals</td>
<td>• Not part of WDHB EMR</td>
</tr>
</tbody>
</table>

- To date, minimal funding
- Non-compliant
- Not part of GP EMR
  - Must copy PDF record
- Not part of WDHB EMR
Dermengine.com

• Teledermatoscopy platform in private sector
• Mobile app
• Includes pathology module
• 12 mths free with Molescope 2
Case 6: 2016
Case 6: 2016
Case 6: 2016

• Diagnosis?
Case 5: 2016

BACK Gross Description. The specimen consists of a skin ellipse 53 x 12 x 10 mm with a central brown patch 12 x 7 mm. The entire lesion has been processed. 4 R 3L Microscopy. Sections show skin with a melanocytic lesion composed of melanocytes with a pale cytoplasm and enlarged, hyperchromatic nuclei. The melanocytes proliferate singly and in nests at the dermoepidermal junction. Single melanocytes are present at all levels of the epidermis in a buckshot scatter. There is no evidence of dermal invasion. The lesion is 2mm from the closest resection margin. MALIGNANT MELANOMA IN SITU, SUPERFICIAL SPREADING TYPE
e-Triage

**Notes (Internal Use Only)**

Decline With Advice: Thanks for the image of the naevus between this child's toes. It's an awkward area to photograph. The mole is HARMLESS; it has a uniform parallel furrow pattern. The lesion will persist. If it loses its uniform structure, we'd like to take another look, but there is no specific need for medical monitoring.

**Notes to Referrer**

RCC Use Only
- NZ Residency Query
- ACC Query

Patient Details
- Out Of Area: DHB

Referral Details
- ACC Query

Waikato District Health Board
E-Triage: decline referral

Clinical Information

Reason for referral/ Diagnosis / Problem
multiple pigmented lesions

Details
30yo female
presented today for mole check
O/E multiple small lightlypigmented 2-3mm lesions over back and arms and neck,
larger one under left breast
she is concerned abt one on her back that has recently become itchy
also multiple small pink raised lesions
I would appreciate review in virtual lesions clinic pls ? anyneed biops y/ excision
thanks

Notes to Referrer

Decline Insufficient information. The virtual lesion clinic accepts up to 5
lesions for an opinion, but these must be clearly identified by the referring
clinician. We do not see patients at the skin clinic for "skin checks" due to
capacity problems.
Efficiency gains of eTriage

- Paper triage: 589 referrals June/July 2015
- eTriage: 626 referrals June/July 2016
- Time to triage ↓ 4.8 to 1.9 working days
- Referrals with images ↑ 16 to 59
- eAdvice ↑ x 4
Case 7: June 2017

Clinical Information

<table>
<thead>
<tr>
<th>Reason for referral / Diagnosis / Problem</th>
<th>Poliosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>This 29 y/o patient had a virtual DHB consult with one of the GPs from town as he was complaining of patch white hair and skin in some areas. He was diagnosed with possible poliosis and was told to be referred to dermatology. He came in has patchy rounded patches of white/grey hair around beard area, no obvious areas of lighter skin colour. Does this need any management?</td>
</tr>
</tbody>
</table>
Case 7: June 2017

- Diagnosis?
- Management?
Case 5: June 2017

Confirmed Cancer  
High Suspicion of Cancer

- Yes
- No

Accepted
Declined
Other

- Below capacity threshold
- Insufficient information
- Not eligible for publicly funded care
- Patient current to service
- Patient not medically fit for service
- Return to referrer advice/guidelines/clinical pathways
- Service not required
- Transferred to another organisation
- Transferred to another specialty

Notes (Internal Use Only)

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Notes to Referrer

Decline Return to referrer advice/guidelines/clinical pathways. This patient with poliosis (white hair) may have vitiligo, alopecia areata, or conceivably, a combination. Check the affected areas to see if hair growth is sparse, if so, AA is suspected and check out scalp for other areas. If not, perform full body skin examination for vitiligo (including eyelids, lips, axillae, hands feet). Either way, offer topical steroid e.g. betamethasone valerate lotion, applied accurately to affected areas daily for 6 weeks then two days per week for 3 months. Dyeing can be done (precaution, hair dye allergy is common). We don't offer appointments [for...]

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Options to decline referral

- Ministry of Health
- National patient flow project
<table>
<thead>
<tr>
<th>Decline reason</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below capacity threshold</td>
<td>The referral is appropriate and the patient would benefit from the Service but the referral is below the Waikato DHB capacity threshold.</td>
</tr>
<tr>
<td>Insufficient information</td>
<td>The triaging clinician determines that there is insufficient information available to prioritise the referral, for example, a diagnostic test is required prior to a decision and it is expected that the referrer will arrange this. A new referral will be generated if and when additional information is provided.</td>
</tr>
<tr>
<td>Not eligible for publicly funded care</td>
<td>It is determined at the point of prioritisation that the patient is not eligible for publicly funded care and Waikato DHB elects not to provide the requested Service.</td>
</tr>
<tr>
<td>Patient current to service</td>
<td>The triaging clinician determines that the patient is already under the care of the service being referred to i.e. referral is for information only or an update of the patient's status.</td>
</tr>
<tr>
<td>Patient not medically fit</td>
<td>The referral is appropriate and the patient would benefit from the Service but the patient is not medically fit for the referred Service e.g. hip replacement referral for patient with severe COPD.</td>
</tr>
<tr>
<td>Return to referrer advice/guidelines/clinical pathways</td>
<td>The triaging clinician determines that they do not need to see the patient and replies to the referrer with advice on managing the patient, which may include reference to guidelines such as Map of Medicine.</td>
</tr>
<tr>
<td>Service not required - Below clinical threshold</td>
<td>The referral is appropriate and the patient would benefit from the Service but the referral is below the WDHB clinical threshold for treatment.</td>
</tr>
<tr>
<td>Service not required - Can be offered an equivalent or more suitable service in Primary Care</td>
<td>The triaging clinician determines that the patient is likely to be managed more appropriately by an equivalent or more suitable service in Primary Care.</td>
</tr>
<tr>
<td>Service not required - Does not require referred services input</td>
<td>The triaging clinician determines that the patient does not require any input from the service they have been referred to.</td>
</tr>
<tr>
<td>Service not required - Not suitable for referred service</td>
<td>The triaging clinician determines that the patient is not suitable to be managed by the service they have been referred to.</td>
</tr>
<tr>
<td>Service not required - Patient circumstances not appropriate for referred service</td>
<td>The triaging clinician determines that the patient's circumstances mean that they are not appropriate for input from the service they have been referred to.</td>
</tr>
<tr>
<td>Service not required - Patient unlikely to benefit from referred service</td>
<td>The triaging clinician determines that the patient is unlikely to benefit from input from the service they have been referred to.</td>
</tr>
<tr>
<td>Transferred to another organisation</td>
<td>Patient is domiciled in the catchment area of another DHB or requires input from an external service (e.g. Ministry of Education) and will not be seen by Waikato DHB.</td>
</tr>
<tr>
<td>Transferred to another specialty</td>
<td>Redirect to an internal WDHB service e.g. incorrect service selected, more appropriate service available.</td>
</tr>
</tbody>
</table>
A case of discoid eczema

<table>
<thead>
<tr>
<th>Reason for referral/ Diagnosis / Problem</th>
<th>Discoid eczema</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>&quot;He appears to have quite bad discoid eczema and it has not responded well to treatment with topical steroids. We have attached photographs to this. Rash has not cleared up since then. Improved with ABs and on it ment but never clears. Still very itchy. New spots are still coming up. Start off as a small spot and end up being 2-3cm in diameter. No fevers. No one else at home has the rash.&quot;</td>
</tr>
</tbody>
</table>


**A case of psoriasis**

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**Replied:** 04-Jun-2017 10:08

Decline Below capacity threshold. Yes, this is discoid eczema. At the moment, not exudative so flucloxacillin not required. Betamethasone valerate is suitable potency. When lesions dryuse ointment, when oozy use cream. Provide info: http://www.dermnetnz.org/topics/discoid-eczema/. Get patient to use liberally but precisely on the plaques daily x 2 weeks then twice weekly. As he’s already done this, also please prescribe prednisone 40 mg daily until clear (likely 2 weeks) then half dose for same duration progressively. Encourage emollient ++ when itchy or skin is dry. If has breakthrough extensive disease, refer back for phototherapy or second line systemic therapy.

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<table>
<thead>
<tr>
<th>Circumstances not appropriate for referred service</th>
<th>Service not required - Patient unlikely to benefit from referred service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circumstances mean that they are not appropriate for input from the service they have been referred to.</td>
<td>The triaging clinician determines that the patient is unlikely to benefit from input from the service they have been referred to.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Transferred to another organisation</th>
<th>Transferred to another specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient is domiciled in the catchment area of another DHB or requires input from an external service (e.g. Ministry of Education) and will not be seen by Waikato DHB.</td>
<td>Redirect to an internal WDHB service e.g. incorrect service selected, more appropriate service available.</td>
</tr>
</tbody>
</table>
Psoriasis: no images. Advice + FSA.

Academics Priority 3. We are short of appointments. Often strep-related psoriasis settles on its own. If it does, please cancel appointment. We will arrange phototherapy if it remains extensive when we see her. In the mean time, ensure she applies Daviebet only to plaques and no more than 30 g per week for 2 weeks then 30 g for 2 further weeks then stop. The ultrapotent topical steroid is unsuitable for widespread small plaques or guttate psoriasis and an emollient would be more suitable.
# eTriage request for advice

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GP</strong></td>
<td>• Triage takes longer</td>
</tr>
<tr>
<td>• Usual system</td>
<td>• Not job-sized</td>
</tr>
<tr>
<td>• PMS populates fields</td>
<td>• Referrals may not contain appropriate information</td>
</tr>
<tr>
<td>• Easy</td>
<td>• Images are variable in number and quality</td>
</tr>
<tr>
<td><strong>Dermatologist</strong></td>
<td></td>
</tr>
<tr>
<td>• Referral centre delay (2–4 days)</td>
<td></td>
</tr>
<tr>
<td>• Record retained in CWS</td>
<td></td>
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<tr>
<td>• Reduces FSAs</td>
<td></td>
</tr>
</tbody>
</table>
Virtual DHB –
the **FREE** app that puts your health in your hands

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Virtual DHB: healthcare wherever you are
## Virtual DHB® via HealthTap®

<table>
<thead>
<tr>
<th>Actions</th>
<th>Platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Banked Q&amp;A</td>
<td>• Desktop</td>
</tr>
<tr>
<td>• Active Q&amp;A</td>
<td>• Tablet</td>
</tr>
<tr>
<td>• In-box consultations</td>
<td>• Smartphone</td>
</tr>
<tr>
<td>• Live consultations</td>
<td>• Integrated with EHR</td>
</tr>
<tr>
<td>• Curb-side consultations</td>
<td></td>
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<tr>
<td>• Peer review</td>
<td></td>
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<tr>
<td>• Grand rounds</td>
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</tr>
</tbody>
</table>
Virtual DHB in-box consult
Virtual DHB live consult

IMPORTANT UPDATES

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Virtual DHB live consult

Subjective
Blisters started to clear then recurred despite ongoing 30 mg prednisone daily. 20-30 blisters today, itch mild, and painful intermittent rash on abdomen and under the skin. GP found swollen lymph glands left arm pit (no obvious infection). Right elbow was easier ulcerated now healing, but not left. Legs are not as swollen, breathless but not as breathless as before. Taking methylprednisolone 10 mg. No side effects.

Objective
Patient looks well but photos show large bullae lower legs. No obvious infection. Blood tests 17 June satisfactory.

Assessment
Deteriorating bullous pemphigoid

Plan
Checklist:
Increase prednisone to 40 mg daily in the morning
Virtual DHB curbside consult

Hi Amanda, the patient is female, forty and well - no symptoms apart from this rash which started as a patch on neck then has spread up on torso limbs and face. Non itchy. I thought it was Fifth, have advised her that it is vital self limiting. Is diagnosis correct? Unusual in adults? Any other thoughts?

Hi Robin - this looks like acute urticaria to me! Fifth disease can occur in adults, but starts with chapped cheeks. Often, several members of family are affected.
Case 8: April 2017

- Possible SLE
- Nail abnormal 2 yrs
- Fungal clippings neg
- Diagnosis?
Case 8: April 2017

- Psoriasis or ageing
- No tx

Assuming this to be great toenail, I will describe it. There is distal increased curvature (pincer) nail with marked subungual hyperkeratosis. This appearance can be due to psoriasis or ageing / reduced speed of nail growth (eg associated with age).
Virtual DHB: benefits over v/c

- Convenient for doctor and patient
- Scheduling easier
- No “special” equipment
- Easy to attach images
- Permanent record of consultation – SOAP note
  - Online
  - Clinical Work Station
  - Soon on GP’s record too
Virtual DHB: benefits over NZT

• Direct to doctor or direct to patient
• Designed for mobile
• Documentation
  o Clinical Work Station
  o Soon on GP’s record too
Virtual DHB - disadvantages

- No built-in audit / case follow-up
- More difficult to conduct research
Future of teledermatology
Maturing technology & systems

- Dermatology as usual
- Consolidation of standards and protocols
- Establishment of funding streams
- Increasingly mobile
- Artificial intelligence --- intelligent assistance