Academy of PHYSICAL MEDICINE

Text Summary

Dermatology
With Olivia Stevenson

Olivia Stevenson
- A dermatologist
- The lead cancer clinician dermatologist at Kettering General Hospital in Northamptonshire since 2005.
- She works in private practice across Northamptonshire.
- Has a particular interest in myeloma and psoriasis.

Are manual therapists likely ever to be the first people to spot a problem?
- Absolutely.
- Patients don't like going to see their GP with sometimes what they think of as minor.
- If it's on their back, they may not even be aware that they have it.
- Manual therapists would refer on a private basis directly or normally, it would be recommended that somebody sees their GP.

How good is that normal first point of contact, the GP, at recognizing skin problems?
- It is completely variable.
- GPs actually have so little commitment to have dermatology training within their curriculum.
    - Some GPs will be very good because they have a passion.
- Unfortunately, even basic dermatology is rocket science if you've never seen it before.

Is dermatology a popular specialization?
- It has now become the second most competitive specialty in all of medicine.
    - Second only to cardiologists in the number of applicants per post.
- Still a fairly small specialty.
    - There are over 200 empty consultant posts in the country because we're not training enough dermatologists.
- Interest people due to having to:
    - Deal with infants up to 105-year-olds.
    - Carry out some operations.

High Surgical Success Rate
- It's actually pretty standard (high success rates)

- If excised properly, skin cancers should give you 94% to 96% clearance rates.

What do you encounter?

- Everything- from the mundane to the ridiculous.
  - Black skins are referred in as skin cancer/infants with total body eczema who have not been referred.
- Every rash, allergy rashes, eczema, psoriasis-type rashes, acne and all the skin cancers and a lot of sun damage.

Patient Presentation

- With symptomatic skin conditions, patients present very early because they are very uncomfortable with itch or soreness.
- Acne is a big issue because spots are both sore and unsightly.
- Issues with moles can be presented late
  - E.g. The highest risk of skin cancer in men is the back
    - They don't really look at their backs.

Sun Damage

- We get loads.
  - It's even more dangerous because we all love it, we leap out in our shorts and t-shirts and forget the sun cream.
  - We forget the sun cream because we're not in Spain and we burn.
- Some men have a 'slight follicular challenge'.
  - They lose the protection of their hair probably 10 or 15 years before they lose their hair.
    - Fine, sparse hair does little good.
    - Wear a hat.
  - There is an awful lot of skin cancers, especially in the 70's and 80's, on the top of their head.

Skin Cancers (and Risk Factors)

- Both binge sunbathing and constant exposure are equal risk factors.
- Sunburns under the age of five are the biggest risk factors.
  - Under the age of five, it's something you can't turn the clock back.
- Constant sun throughout your life puts you at very high risk of skin cancer.
  - Especially squamous cancers but also basal cell carcinomas.
- If you have hundreds of moles, you are at much higher risk of developing melanoma.
- Not everybody develops skin cancer (not everybody who smokes gets cancer), but it is difficult to predict who.
- There's actually very little family history with melanoma.
- There are a few cancer prone genes in skin cancer but they are actually very rare
  - Skin type and habits are more familial concepts.

Approach to moles

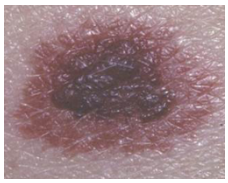
- Fair approach is to get checked if a mole is growing, bleeding or itching.
  - Important to not leave common sense at the door.

    - "If you look at something and you wouldn't look twice at it on your sister, why would you look twice at it just because your patient asked you about it?"
- It's sometimes difficult when somebody has good medical knowledge but little dermatology training.
- "You see a lot of normal to catch the bad stuff"

Changes to moles

- Difficult: patients do notice changes 'overnight'.
- Therefore, history is really difficult. How can you plot when changes really took place?
- GP might be tempted to just look at the one mole complained about rather than stripping the patient off.
    - Comparing moles is, however, extremely useful in spotting anomalies.
        - If there are five other moles that look virtually identical to it, it doesn't really matter what that mole has done because it's behaving exactly like all of its brothers and sisters.

'A Normal Mole'?



- They will grow gradually throughout our life.
- They will darken initially and then probably lighten from 40 or 50.
- After this point, they begin to disappear.
    - We have very few moles when we're old.
- In fact, we continue to get new moles well into our 40's.
    - That's completely normal.
- We like symmetry in a mole.
    - If you could cut it down the middle and it would look the same, that's good.
    - Even if a mole is not perfectly round.

Normal moles in relation to skin type

- A mole is a collection of melanocytes in a little area.
    - A collection of pigment cells in the skin.
    - They can be anything from pink to nearly black, depending on the amount of melanin we produce.
- Fair-skinned people produce fairly pale moles, pinky brown moles.
- Dark-skinned people produce moles which are nearly black.
- Redheads produce moles which are generally pink.
    - They don't have much melanin on board.
- When somebody gets a mole which breaks this mould, it can be concerning.
    - All about pattern recognition.
    - Manual Therapists have a great opportunity to spot anomalies as they see moles all the time.

Is it therefore very difficult to spot skin conditions in black people?

- Absolutely, it is very difficult
- Redness doesn't really show up well in the dark skin
    - Rashes can look very different.
- Skin cancer is very rare in dark-skinned people but presents very late.
    - It's so difficult to pick up.

- *Should we be worrying about dry and scabby moles?*
- Almost certainly not.
- Most things that are scabby and itchy weren't moles to begin with.
- Often older patients have quite crusty, warty, carbuncle-type things.
    - They do all the things we're told to look out for in skin cancer.
    - They grow, they itch, they bleed.
- Unless it is a known mole, you can be happy.

Lipomas
- Little fatty lumps
- Not really known what causes lipoma.
- Some people are prone to them.
- If they're painful, they can be removed.
- If they're so large that they stick through clothes, then they should be removed.
    - Otherwise, best ignored.
        - If not completely removed (common in surgery), they simply grow back.
- Would not be treated on the NHS until they reach a good size because they're cosmetic.

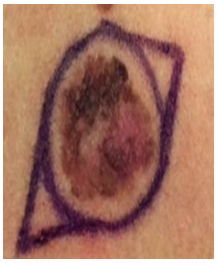
Red Spots
- Called cherry angiomas or the Campbell de Morgan spot.
- We all have 1 or 2 and some have even more.
- Can vary greatly in size.
- No number is a worry and nothing about them is a worry as long as they all look like each other.

Liver spots
- Patches of sort of darkish brown skin that more elderly patients can get.
- Two things that people might call liver spots:
    - Seborrheic Keratosis- senile warts on the back and on the face.
        - These can get quite crusty but especially on the hands and arms, they might be very, very flat.
    - The other type are large freckles.
        - As long as there are lots of them and they are similar, there isn't a problem.
- There is a pre-cancerous freckle which can occur but it tends to be on the head and neck.
    - It wouldn't be beautiful and symmetrical like standard 'liver spots'.

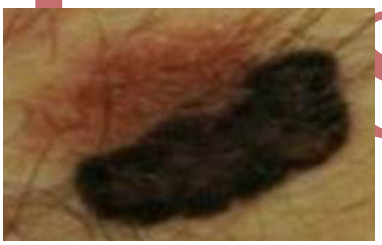
Birthmarks
- Mainly dealt with because mums worry that the birthmark has changed over time.
- A giant congenital nevus can change shape as a person grows.
- Becker's nevus, a hairy patch on the shoulder, can change shape as they grow.

- There's a lot of conflicting evidence about the risk of birthmarks in terms of cancer.
  - All congenital nevi are at a higher risk of developing melanoma than a normal mole.
  - Obviously, this is still rare but probably riskier than other moles.
- A type of birthmark which can turn into skin cancer is called a rodent ulcer.
  - They can turn into basal cell carcinomas- about 20% lifetime risk.
- Often people profess to having a birthmark 'their whole life' but it may actually have only been there 15 years.
  - It's important to get a good idea of whether it really is a birthmark.
- If a birthmark itches, the best thing to do is moisturise.

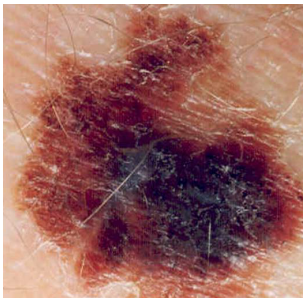
Melanomas



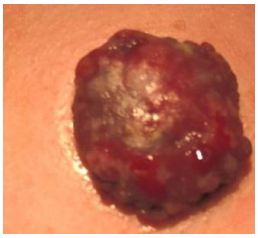
- Average 4-5mm when they are picked up.
- Asymmetrical.
- May lose pigment completely in areas or be a mix of different colours.
- Can be much bigger than other moles (e.g. 10-15mm across)



- Melanomas grow from the layer of the skin between the epidermis and the dermis.
  - The very top layers of the skin.
- Then, cancer cells will then descend into the dermis.
- They can start to become cancerous and have the potential to spread just like any other cancer.
- This is measured in mm and is called the Breslow Thickness.
- If a mole is raised above the skin, chances are it's quite thick below as well.
  - How far it goes is very, very strongly linked to prognosis.

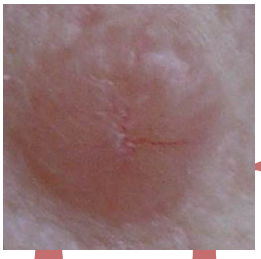


- Not good when pigment comes right up to the edge.
    - Every mole should fade out gradually towards the edge.
- The mole in the image above had a Breslow Thickness of over 4mm.
- Three centimeters of skin had to be removed around the scar.
- It's a high-risk melanoma with a 50-50 chance of demise long-term.
- Such a state would be monitored three-monthly for five years.
- Nothing specific to do in order to prevent reoccurrence- the damage is done.



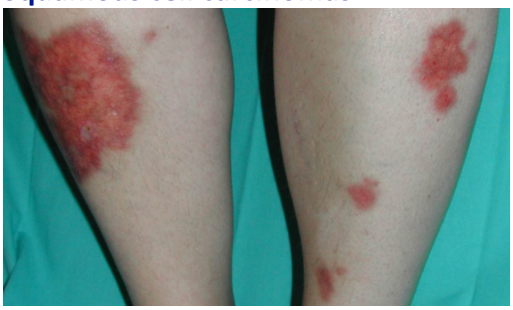
- Nodular melanoma
    - Nodular melanoma grows much more rapidly.

Basal cell carcinomas



- They're incredibly common.
    - Some of them present ridiculously late because they creep up.
- As they mature, they start to scab and crust and weep but then they heal over.
    - The patient often mistakes this for it clearing.
    - It's still there because they can look just like a normal little intradermal nevus.
- Certain BCCs can look a normal colour but are completely shiny.
- Can look a bit like eczema but are stubborn- they do not come and go.
- They ulcerate and scab- often discovered 'when blood is left on the shirt'.
    - Caused because the tumor is no longer doing what skin should do.
        - It's not producing an intact epidermis.
    - More common in men, but very common to both sex.
- Can be present on the face:
    - Lips
    - Around the eyes
- There are very rare instances of basal cell carcinoma spreading like a cancer.
    - It's very rare and there are chemotherapy-type treatments available.
        - However, it often results in disfigurement (Eye prosthesis etc.)
- There are many flat BCCs which can be treated with cryo, liquid nitrogen or with topical chemotherapy.
    - Something smaller, would probably be treated with a cream because cryo burns can be quite painful.

Squamous cell carcinomas



- E.g. Necrobiosis Lipoidica.
  - Occurs in diabetics.
  - Orangey patches that are a bit dented in the center.
    - That's Pustular Psoriasis.
- Middle-grade cancer which grows rapidly.
  - Need to be picked up early else they reach a large size.
  - Distinguished with a rapid-growing lump.
  - Scabbing and crusting.

In Clinic: Conditions to avoid touching? Are gloves necessary?

- When noticing a skin condition, ask if they know what it is.
  - If the patient knows that it is eczema or psoriasis, you can ask if anything irritates the skin.
  - Important to recognise that a handshake will not harm the practitioner.
- There's actually very few conditions which you're going to be able to transmit to somebody else, even yourself.
  - Standard Procedure is fine: wash your hands between patients.

Gloves (in hospital)

- Rarely worn.
  - Unless examining a personal area or something that's clearly grubby.
  - It's a comfort to the patient to know that they haven't got something contagious.
- Always washes hands in Alcogel.
- In fact, the feel of skin, lesions, etc can be important and is difficult whilst wearing gloves.

Can pompholyx eczema be aggravated or helped by aqueous cream?

- Aqueous cream is an adequate soap substitute- but would never be encouraged.
- It is not a good moisturiser.
  - The best option is a urea based moisturizer like Calmurid, Eucerin, Balneum or even just any good hand cream.
  - You need to moisturize every single time your hands are wet and try to avoid soaps
- Washing in aqueous cream has been demonstrated to be slightly more dry than washing with water alone.
- Most pompholyx's aggravated by wet work.

Any problems continuing to work while having to use industrial strength steroids to relieve itching?

- Steroids are great stuff that work really, really well.
- People are often frightened to use them but they sometimes can be needed to alleviate an itch.
    - Would be used first thing and last thing in the day.
    - No problem treating an hour after application.
- Industrial strength steroids can thin the skin.
    - The phobia around it is so well entrenched amongst all in the industry that it is rarely seen.

Other red, thickened skin conditions

- Pityriasis rubra pilaris cases a reddy, yellow thickening of the hands and soles with or without a rash, with or without itch.
- Thickening of the skin can just be a very interex moral psoriasis even without the itch.
- Elderly people get hyperkeratosis which just means the skin thickens.
- After the menopause, you could get something called keratoderma climactericum.
    - Where the skin becomes very thick and scaly and cracks on the soles.

Scabies

- Tricky to recognise.
- A little mite leaves a trail of faeces on the skin, to which we are allergic.
    - We then produce histamine which makes us itch.
- Scabies could look a bit like an eczema but they tend to have spots and burrows in their web spaces, on the soles of their feet and on the palms of their hands.
- Also, quite a spotty eczema may be present.
- There may be a number of scratch marks from their own fingers.
    - It's an intensely itchy condition.
- You do not have to be terribly dirty to get scabies.
    - Like head lice in school, you just have to have mixed with the wrong person.
- Still fairly common.
    - People who work in institutions: schools, prisons etc. are susceptible.
    - Close physical contact (sexual intercourse amongst other things)
- Treatment similar to head lice treatment.
    - You paste it on, leave it for a few hours and wash it off.
- Very rarely affects the face except in babies and very old people.

What's the consequence for the waiting room and for treatment tables?

- Obviously, don't treat if somebody has scabies- they'll need to treat that first.
- The normal precautions of wiping down the bed with an alcohol wipe would suffice.
- Waiting room would be fine as the patient would have had clothes on.

<u>Has dermatology been affected by NHS cuts?</u>

- Not necessarily, but there's a need to be a little bit stricter.
- Cosmetic or 'nuisance' issues would not be removed on the NHS, ordinarily.

- If a mystery, something would be removed so that a biopsy can be performed.

Psychological impact
- Not taken into account personally (by Olivia) as it still won't be funded.
- The hospital has a contract with the CCG.
    - The CCG have to agree.
- If the patient's life is being made a misery by it, they may or may not agree to remove it.

Benign moles
- Discourages people from removing moles.
- Normally, those that want them are young and they will naturally get many more moles during their lifetime.
- A slightly funny-looking mole looks better than the ugly scar which is usually left behind.

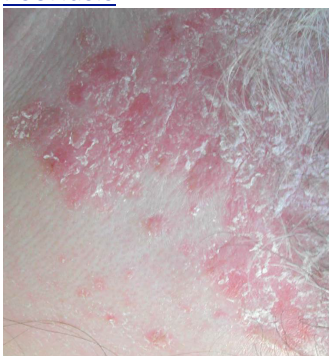
How/Should Manual Therapists refer(?)
- Manual Therapists can refer privately.
- Patients who are insured still need to go through their GP for their claims.
- The CCG now demands that all referrals come through the GP.
    - Otherwise, the funding stream just isn't there.
- Lot of (GP) surgeries will have someone within the surgery who knows a bit more about dermatology.
    - Most of the practices will have nominated someone or someone will be getting special training.

<u>Vitamin D deficiencies</u>
- We've always been vitamin D deficient in the winter.
- We just about get enough sun in the summer if you work indoors.
- You do not need a huge amount of light.
- It's about a balance- you don't want to be so over protective that you are vitamin D deficient. However, you need to keep yourself protected too.
- If at risk of skin cancer, it's better to be vitamin D deficient and take a supplement to compensate.
- Deficiency can be noticed through a few symptoms, e.g.:
    - Fatigue
    - Myalgia
- Across the counter Vitamin D tablets would only be fully effective if you took 8-10 a day.
    - They work, but not as well as sun.
- The recommended daily dose is 800 international units, three times a day.
- Unsure on effects of too much Vitamin D but probably very little and not much study on it.

<u>Scabby Scalps</u>
- There are so many reasons people get scabby scalps.
- You can get anti-fungal shampoos and a calming shampoo.
- There are a couple of products that aim particularly at itching in the scalp.

    - Eucerin licorice shampoo/Eucerin DermoCapillaire which is really useful for just itching.
- If people have actually got scabby, itchy spots, they've either got an infection or they've got a type of eczema or psoriasis.
    - They probably need steroids
- They need to see their GP if a simple medicated shampoo isn't helping.
- With a non-hair bearing scalp, it's often sun damaged.
    - Wear a hat.

Psoriasis



- Typical patch of psoriasis- quite silvery scale, fairly well demarcated.
- There are little bleeding points underneath the scale.
    - Often where the patient they would've scratched it away.
- There are a huge number of effective remedies for psoriasis.
- Some patients will be totally mortified by the three patches and others will come with it virtually covering their body and they're not really fussed.
- Can be very itchy, but a lot of it is just very disfiguring and it's very messy.
- All treatments for psoriasis are available on the NHS. Creams, tablets, injections etc.
    - Would be different however with homeopathy or alternative medicines.
- There's a group of drugs called biologics.
    - Agents that are used primarily in colitis, arthritis, psoriasis and autoimmune diseases.

- Psoriasis- pink and scaly, fairly standard.
- Flexural psoriasis- very common particularly under the breasts, under the armpits, in the bottom.

- There are grading systems for conditions such as psoriasis.
    - PASI- psoriasis activity and severity index
    - DLQI- dermatology life quality index
- Asks people to measure how much their psoriasis is affecting their day-to-day life.
- Anything over about five is considered to be moderate to severe.
- There is an app which can be downloaded to help measure- Psoriasis 360 by Janssen.
    - A lot of dermatologists won't use it.
    - It's very helpful when you put people on toxic drugs to have an unbiased idea of whether how much better they're getting.

Consequences if untreated

- Mostly lifestyle.
    - Discomfort.
- More likely to get secondary infection if you've got regularly broken skin.
- Patients with psoriasis are much more likely to get psoriatic arthritis.
    - In this case, treatment would be required promptly to prevent joint damage.
    - Caused by inflammation on the joints- similarly to rheumatoid.

In Clinic

- Best to advise moisturising and soap avoidance to patients.
- There is lack of evidence that soft tissue work is important in these conditions.
    - Except where you would expect it to be like lymphedema or pyloritis.

Mole Mapping

- In America, it's a big thing.
    - They use vastly expensive computer technology where every mole is photographed and the size of every mole is measured.
- There is no NHS institute in the country that does it.
    - It's just way too expensive technology.
- There is no NHS institute in the country that does that.
- In the UK, there is the dermatoscope and each mole is examined individually.
    - Clinical skills to decide if a mole needs to be mapped.
- Certain big hospitals will mole map for research purposes.

Fungal and Yeast Conditions

- All our inflammatory diseases tend to be very symmetrical whereas infections enter in one place and they stay in one place.
- If a bad fungal condition, use oral Lamisil or oral terbinafine to treat.
- If mild, the patient should be advised to buy some Daktarin or terbinafine cream.
    - These are available over the counter.
- If untreated, Athlete's Foot, can cause cellulitis.
    - If unfit, diabetic or the patient has other risk factors for developing infections in the legs then treatment is definitely necessary.
- Sometimes, cheap antifungals will do the job, however if the condition doesn't clear, get a scrape taken.
- In clinic, it can be easy to ask about whether the patient knows they have a fungal infection.
    - The conotation of a name like Athlete's Foot is being fit.

Common in clinic

- Tinea, which is ringworm.
    - It can cause crotch rash.
    - It can be in all those sort of sweaty areas that get infected.
    - Contagious- if somebody has scaly patches that look a little bit like a ring, take caution.

    - Pretty common in children. Adults are much more likely to appear with eczema or skin cancer.
- In similar areas, you can also get candida which is like a thrush infection.

- Discoid eczema is often treated as ringworm.
- In reality with ringworm, you'd find that the edge is darker and it pales in the center and in addition, it is slightly more blistery.

- Tinea incognito can look and be treated like its eczema.
    - Steroid treatments reduce inflammation, meaning the red patch reduces.
        - However, the tinea is still growing.

Onychomycosis
- Fungal infection of the nails.
- Surgical treatment can be successful but is rarely needed.
    - Oral antifungals usually preferred to treat.
- If the infection keeps reoccurring, remove the nail and treat with an oral antifungal.
    - The infection which is lying in the nail bed needs to be treated.

Pityriasis Versicolor
- A yeast infection that lives mainly on our scalp that falls down on to us.
    - The yeast gobbles up the pigment which is much more obvious when somebody tans.
- Treat with anti-fungal shampoo.

<u>Bio-Oil usage and Stretch Marks</u>
- The massaging of a scar rather than what you're massaging it with is most important.
- With stretch marks, it doesn't seem to make any difference except softening the skin before they stretch.
- If a scar is lumpy, massage and use a silicon gel.
- No real effective treatment for stretch marks
    - Time is the only solution- they fade gradually.

<u>Ulceration or Vascular-related skin discoloration</u>
- Anyone with ulcers on the lower legs needs to be referred especially if the foot is cold or painful.
- Ulcers anywhere above the knee are probably not vascular-related.
- Rawer areas tend to be very low-grade skin cancers.

<u>Shingles</u>
- People who've had shingles before or even a cold sore will know that you sometimes get the tingle and burning before the rash comes out.
    - They might know it's going to come but there's very little on the skin.

- Whilst it's blistered, it's still contagious.
- If you've already had chicken pox, you can touch shingles.
- Shingles comes because your immune system is low.

Pityriasis Rosea

- Its cause is unknown.
- One of the viral trigger rashes that just comes out.
- There is a herald patch- the big, red patch- then there is a wash of dry, scaly red patches.
    - May or may not be itchy.
    - 6 or 8 weeks later, the patches disappear.