

Title

Clinical Review: Consultation and Clinical Assessment of the Skin for Advanced Clinical Practitioners

Introduction

Reflecting international trends, in all corners of the United Kingdom (UK) changing demographics of an ageing population has resulted in a shifting pattern of disease from acute illness to complex and multiple long-term conditions (Royal College of Nursing, 2014). Currently, these challenges add significant medical workforce pressures, and as a result over the last two decades the role of Advanced Clinical Practitioner (ACP) has emerged to relieve these pressures (Reynolds, & Mortimore, 2021). Unless the ACP works within a specific speciality, the transition to ACP roles is challenging, to senior nurses, who make the transition to novice ACP's, that requires a broad knowledge of both medical and surgical medicine and an ability to work both within the acute hospital setting and primary care (Reynolds, & Mortimore, 2021). Therefore this clinical review, is the first of two articles, designed to support all ACP from acute hospital settings to primary care in consulting and assessing patients out with a dermatology setting.

Despite around half of all the UK population experiencing a skin condition, requiring medical attention, at some time in their life, clinical assessment and consultation of the skin remains an area of healthcare that many practitioners feel uncomfortable with due to the lack of training and education and the complexity of dermatological presentations (Schofield, Grindlay, & Williams, 2009). Skin is the largest organ of the human body and yet is often not assessed with a degree accuracy or confidence, which may be in part due to the large number of potential diagnosis (over 2000) (Levell, Jones and Bunker 2013). However, those

with less familiarity of dermatological conditions, can develop their knowledge and experience, to be able to offer a safe assessment and appropriate referral through acquisition of a systematic and thorough history and assessment. This clinical review presents some key elements to history taking, consultation and assessment specific to reviewing a patient with a skin complaint, to help ACPs develop confidence and knowledge.

The importance of developing knowledge on skin conditions cannot be underestimated. Skin conditions can range from minor conditions, resolved with over the counter preparations to more life-threatening situations which can result in intensive treatment. ACP will encounter skin conditions in every speciality and therefore require a sound knowledge base of skin disorders and assessment is key to dispel patient concerns about contagiousness, and understand the social and psychological impact of any skin disease.

The first clinical review will specifically focus on advanced clinical assessment of the skin. This will be structured using a standardised approach to clinical assessment with a specific focus on dermatology conditions. While there are a range of consultation models that ACP use to support practice, it is beyond the scope of the clinical review to critique consultation models and as such a standardised approach has been adopted, so the reader can adapt to suit their own consultation style. This article assumes the ACP will have knowledge and understanding of normal skin health, which is required prior to being able to consult a patient with a skin complaint, and is beyond the scope of this article to address.

The Consultation

As with any consultation, when obtaining a history, questions should be presented in an open and sensitive manner. This is particularly pertinent for a skin complaint as patients may not know the specific language to use or be embarrassed or concerned and could result in key information or red flags being missed. The ACP should present themselves in a professional manner using open body language and engaging the patient to ensure that they feel they are being listened to. There are a range of tools to aid and support effective communication during a consultation, such as, SOLER (Egan 1986) (Table 1.). ACPs should utilise both verbal and non-verbal communication skills when engaging in any consultation and tools such as SOLER support this. The clinical environment also requires consideration before a consultation takes place. Particularly, due to the impact of Covid-19 and resultant social distancing and the use of masks and other personal protective equipment (PPE) as these can be a limiting factor to the consultation for both the patient and ACP. The room should be well lit and quiet if possible to allow for both lip reading and consider any hearing impairments. Additionally, tinnitus is now more common side effect post-Covid and should be a consideration prior to consultation in not just the elderly population. See-through masks if available can be a supportive aid for lip reading patients.

Verbal communication skills have never been so important, particularly with changes in consultation practices, such as telephone and internet consultations increasing exponentially, especially during the Covid-19 pandemic (Rubinelli, Myers, Rosenbaum, and Davis, 2020). However this does come with increased difficulties and rely on refined and well developed communication skills. This is where the use of photographs and webcams may be of benefit for the consultation and assessment of a patient with a skin complaint, however ideally skin consultation should take place in person whenever possible to allow

the ACP to inspect and palpate the area (Chiang and Verbov 2020). Non-verbal communication, particularly in a dermatology focused consultation, also should be considered in line with infection control and social distancing guidelines. The use of touch for both patient and clinician in this context is important to begin to develop rapport and break down any concerns the patient may have due to their skin complaint. The act of shaking hands and touching the patient in their welcome can provide reassurance and acceptance for the patient in this act.

Patient privacy and comfort is important to optimising history taking and allowing the patient to feel comfortable enough to share their 'story'. Skin conditions can often be a source of anxiety or embarrassment for the patient and they may not have previously shared or discussed their condition with anyone else. ACPs must consider the setting of the consultation and how they can, best ensure, that privacy and dignity can be achieved during the consultation.

Demographics

Patient demographics can provide some clues to the potential cause of the skin condition. Some key demographics for ACPs to consider prior to meeting a patient are detailed below. These are usually able to be ascertained prior to the consultation, depending on the setting, and a thorough review of medical notes or online and can help an ACP identify key areas to focus on dependent on the patient demographics prior to initiating the consultation. If you can access information of key patient demographics, this is helpful if this is a newer area of practice for the ACP, and prior consideration of key points can assist the consultation process for both the ACP and patient.

Key demographic details include, age and in particular the extremes of age can offer higher risks for particular skin conditions. Young children are more likely to contract infectious diseases such as hand, foot, mouth and impetigo. In adults the likelihood of malignancy increases with age. The sex of a patient may also offer clues to conditions that are more or less likely than others. For example adult acne for example is more likely to occur in adult women than men, whilst men are more likely to suffer from infectious skin conditions (Tan,& Bhate 2015).

The patient's race may also be a factor in considering or excluding certain skin conditions. Patients with higher levels of melanin (highest levels found in African and Indian ethnic skin types) (Alaluf et al, 2002) are more likely to experience post-inflammatory hyperpigmentation, keloid scarring, and dermal melanocytosis (Slate grey nevi also known previously as Mongolian blue spot) (Kundu & Patterson, 2013). A patient's country of residence or previous habitation can suggest a higher incidence of certain conditions. Leprosy and cutaneous tuberculosis, whilst rarely seen in the UK have much higher levels of prevalence in other parts of the globe (PHE, 2012., Santos et al. 2014). Additionally, as many retired people spend more time abroad, sun exposure without adequate protect, can result in higher levels skin cancer.

History of Presenting Complaint

For ACPs, obtaining a history of a patient presenting complaint is a key component of their clinical role. A history allows regardless of the affected body system or presenting complaint, the key elements that should be included and despite focusing on the

integumentary system, a full history should always be taken to ensure a through picture of the patient. The SOCRATES mnemonic acronym is a useful tool when obtaining a patient history which is traditionally used for assessing pain (Manna, Sarkar, & Khanra. 2015).

Therefore in **Table 2** we have clearly aligned and detailed the questioning for a dermatology based assessment using SOCRATES as a prompt.

Ensuring that the history and exam is clearly documented. This should include a description of the patient and how they present to you at the consultation. The patient's understanding of the disorder and how it has impacted on them and those around them is a vital part of an effective and holistic consultation. Considering the use of open questions and time for patients and carers to respond in their own time and words is key here to support the use of their own words and for the patient to feel listened to. Gaining insight into the patients knowledge and feelings can be of benefit too and this can also be undertaken in a systematic fashion with use of mnemonics such as ICE (Ideas, concerns, and expectation) (Matthys et al. 2009).

Once the history taking had been completed, it is good practice to summarise the history of presenting complaint back to the patient and/or carer **for** an effective way of allowing the patient to offer any relevant information that had not been gained so far. This can also be used as a mechanism to correct any information that may have been incorrectly interpreted (Lloyd & Craig, 2007). It is at this stage of the consultation that the patient can be informed of the next steps, allowing them to prepare for the further questioning and upcoming examination. This can also allow the ACP to collect their thoughts and consider how to progress their line of enquiry and consider potential differential diagnosis.

Systemic Enquiry

The systemic enquiry allows for a brief overview of the other body systems whether or not relevant to the presenting complaint. This process ensures that symptoms not previously mentioned are picked up on and may uncover clues to the presenting complaint. This includes the following body systems and points to include in the assessment:

- *Cardiovascular* – Chest pain, palpitations, oedema etc.
- *Respiratory* – Shortness of breath, wheeze, cough, dyspnoea etc.
- *Gastrointestinal/Genitourinary* – Nausea, vomiting, diarrhoea, urinary symptoms, abdominal pain, menstruation related issues etc.
- *CNS/systemic* – Headache, visual/auditory disturbances, fevers, fits/faints/funny turns etc.

Past Medical History

This is a vital step in the history taking as skin conditions are often associated with underlying conditions such as diabetes, atherosclerotic disease, sarcoidosis, and heart failure. Asking whether any conditions are well controlled, their impact on the patient and their lifestyle as well as any associated appointments/surgery/investigations/procedures that have occurred or are awaited are also important as part of the skin consultation.

Determining any allergies are an important step, the trigger and nature of reaction should be documented. This is an important consideration for a dermatology assessment as allergies can present as skin irritation.

Medication Review

Skin conditions may be triggered or worsened by medications including over the counter (OTC), prescribed, herbal, illegal, and homeopathic. Common medications that cause a trigger are allopurinol, antibiotics, ibuprofen, and phenytoin (Cho, Yang, & Cho, 2017). It is therefore essential that an ACP obtain a full and thorough drug history, including previous drug allergies however mild. Considering checking electronic records to align with the information provided allows for any nuances to be clarified or omissions to be questioned with the patient at this time.

Recreational drug use should be explored as there is an increased risk of conditions such as necrotising fasciitis associated with intravenous drug use. Skin complaints can manifest from infections such as hepatitis B, HIV, and hepatitis C which are all also of higher prevalence in intravenous drug users. This information should be gathered in a non-judgemental manner to ensure that a therapeutic patient-professional relationship is maintained.

Family History

Some skin conditions such as melanoma, eczema, psoriasis, and ichthyoses are all associated with familial trends (internal factors). This should not be confused with environmental causes of skin conditions where those living in the same conditions present with a skin condition secondary to environmental causes or even contagious diseases (such as scabies) transmitted through living arrangements (external factors) (Table 3).

Social History

Travel history is an important factor to consider during a consultation of the skin. History of sunlight exposure as well as environmental or geographical risks should be obtained.

Activities undertaken whilst travelling, alongside hobbies and pastimes that the patient partakes in at home may offer insight into the presenting complaint. Open water swimming is becoming more popular but alongside the obvious health benefits it may have a negative impact on skin health such as 'swimmers itch' (Baldassarre et al. 2017). Other outdoor hobbies may be of risk to the skin, particularly without the use of appropriate sunscreen/UV protection. Conditions such as cutaneous larva migrans and insect bites may present in patients who are returning from travel, it is important therefore to obtain not only a succinct travel history but a detailed account of activities undertaken whilst abroad.

A thorough smoking and alcohol history is important as many skin conditions, such as psoriasis, can be triggered or worsened from these activities. The patient's occupation, and indeed past occupations may be relevant and should be probed. Occupational hazards such as PPE, chemicals, and work environment are potential causes for some common presentations.

Finally, the patient's living arrangements, who is in the house, pets, and location of home may play a part in helping to include or exclude a potential diagnosis. Any recent changes in time spent at home or in different environments

Examination

Prior to the physical examination, if possible to conduct, it is useful to recap the information provided again. This gives the patient a second opportunity to offer further pertinent history and to clarify any salient points. This pause also allows the practitioner to give a short explanation of the examination process. As many consultations are now online or by

telephone it may not be possible to conduct a physical examination at this stage. However, a thorough and structured history may assist the ACP in deciding if they require the patient to attend for a physical examination.

Physical examination of the presenting complaint should be systematic and thorough.

Crucially the practitioner should have a good knowledge of normal skin presentation to allow them to identify the abnormal. Ideally the exam should take place in a well-lit, warm, and comfortable setting where patient privacy can be maintained. It may be appropriate, if available, to offer a chaperone for the exam and patient comfort and dignity should be preserved at all times. It may be beneficial to obtain a torch or lamp to aid visual inspection and a dermascope can provide magnification of areas requiring closer examination and palpation (Chiang and Verbov 2020).

A general inspection should be the first step of this process. Start by noting the patient's general appearance and any immediately obvious skin concerns. Note any obvious discomfort or abnormalities displayed by the patient. To examine the presenting skin complaint a basic ABCDEF approach can be adapted to offer an ACP a structure to the exam and ensure comprehensiveness in the assessment.

A = Asymmetry – is the lesion/complaint symmetrical or asymmetrical?

B = Borders – are these smooth? Irregular? well-defined? ragged?

C = Colour – is the skin complaint a consistent colour or variable? Is it very pronounced or faint?

D = Diameter – measure the size of the presenting skin complaint or in the instances of wide spread rashes the total body surface area (TBSA) that it covers. Useful tools

for this include the Mersey Burns App (Barnes et al. 2015) and the Wallace Rule of Nines (Wallace, 1951), both of which were developed for assessment of burns TBSA.

E = Evolving or changing – does the condition show stages of change or development? Does the patient have pictures of it from onset or if it previously appeared differently?

E = Funny – does it look different to everything else? “ugly duckling” sign

As well as visual inspection of the presenting skin condition it is useful to touch and feel the area. Look for heat, note the texture, swelling, or any other abnormality. An assessment of lymph nodes and a set of observations can also guide diagnosis.

Finally it is then worthy to do a complete skin check including hand and feet (including between fingers and toes and nails), flexural and extensor areas, hair and scalp, mucous membranes, and noting any abnormalities visualised.

Communication and Potential Referral

Following the Examination, the ACP will need to describe and record the findings and communicate this accurately using appropriate terms. Using medical or dermatological terminology rather than colloquial terms to ensure the correct explanation is given. It may also be pertinent to involve medical photography to document the skin complaint for future review comparison and dissemination (Ratner, Thomas, & Bickers, 1999).

Pulling it all Together

Assessing anyone with a skin complaint, requires consideration of the sensitivity of the complaint. Diagnosis, investigation and treatment is a key role for ACPs, and considering a thorough and holistic skin assessment is paramount. For an ACP, developing confidence in skin assessment will ensure that a patient is appropriately assessed and referred as appropriate. For any practitioner, identifying their limitations and seeking experienced support is encouraged and crucial for safe patient care.

Conclusion

Overall as ACP roles continue to increase and work more autonomously then the level of knowledge has also increased. However, despite skin being a common presenting compliant, it is an area ACPs feel less confident to assess. Therefore this clinical review has provided an overview of the key considerations that should be included in the consultation and clinical assessment of the skin. The next article in this two part series will explore the next steps for a novice ACP, considering some differential diagnoses and mimickers, common investigations and treatment options for a patient presenting with a skin complaint. The decision making behind these for Advanced Clinical Practitioners (ACPs) is crucial when caring and supporting a patient with a skin condition/complaint within this role.

Key points

- Despite skin condition being a common presenting compliant this is an area novice ACP feel less confident to assess.
- A thorough and systematic history is an imperative part of any patient consultation including the skin.
- It is important to consider all internal and external factors that may impact on skin.

- A sound knowledge and understanding of normal skin health is required prior to being able to consult a patient with a skin complaint.

Reflective questions

- 1) What is your current knowledge and understanding of normal skin health and would this support you to consult a patient with a skin complaint?
- 2) Think about key points to remember when approaching a patient who has presented with a skin complaint
- 3) Consider how to support a patient and family who comes under your care and how you would support them within the consultation process when assessing a skin complaint.
- 4) Think about what local services or departments are available for referral or specialist advice

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