Skin Rash in a Lady with Lymphoma

Dr Alice Ka Wai Mok, Dr Raymond Lo
Palliative Care Unit, Shatin Hospital, Hong Kong
Correspondence: mkw474@ha.org.hk

ABSTRACT

Paraneoplastic pemphigus (PNP) is an autoimmune blistering disease associated with neoplasm. We report a case of a lady with PNP occurring in a background of non-Hodgkin’s follicular lymphoma shortly after commencement of a chemotherapeutic agent. This case presented with refractory mucositis, multiple skin eruptions and conjunctivitis. The diagnosis was confirmed by histopathological findings. Her condition was brought into partial remission with the use of high dose steroid, intravenous immunoglobulin and mycophenolate mofetil. The case illustrated the importance of body image on the total well-being of the patient. Disfigurement is a perceived alteration of body image that is often observed in cancer patients. Its occurrence may trigger a series of emotional and behavioral reactions that will not only affect the quality of life of the patients, but also compromise the relationships between the patient and the people around. Experience from this case reminded us on the value of communication in a difficult patient relationship. Body image care deserves its own distinctive entity in the care plan for the patient, encompassing the physical, psychological and social aspects, and should ideally be started before the body reality change occurs.

HKSPM Newsletter 2008 April Issue No. 1 p13-17.

CASE HISTORY

Ms Lam is a single 51-year-old saleslady of a clothing store. She used to have a sensitive touch on fashion, often presenting herself with makeup and carefully-styled long hair. She had enjoyed relatively good past health until early 2004 when she was diagnosed with low grade non-Hodgkin’s follicular lymphoma. She presented with incidental findings of left axillary lymph nodes with the diagnosis subsequently made from a lymph node biopsy. The option of palliative chemotherapy was discussed but she decided to observe at that point.

During the following months, her lymph nodes enlarged significantly. A course of rituximab was given once in 2005 but the disease continued to progress. Despite repeated discussions initiated by different oncologists, Ms Lam was reluctant to try further chemotherapy. Not until 2007 when she developed tonsillar enlargement causing mass effect did she finally agree to have another trial of chemotherapy with chlorambucil.

Around three weeks into the start of chemotherapy, Ms Lam developed fever, multiple bullous rash over her neck and bilateral thighs, painful erythema with discharge of her eyes, and multiple erosions over her palates and buccal cavity. She was urgently admitted with a provisional diagnosis of Stevens-Johnson Syndrome. However, subsequent investigations suggested otherwise. Skin biopsy revealed an intraepidermal type of bullae with positive intercellular stain of IgG and C3. Anti-skin antibodies were elevated. Correlating these findings with her clinical condition, the diagnosis of paraneoplastic pemphigus was reached. Prednisolone 40mg daily was started and three courses of IVIG were given. The skin eruptions came under control but mucositis remained refractory. It was decided that no further chemotherapy for the treatment of lymphoma itself would be given for the time being. Ms Lam was then transferred to our palliative care unit for further management.

Unfortunately shortly after transfer, the pemphigus flared again, beginning with a tense blister appearing over a venupuncture site (Picture 1). More and more rash and blisters followed, and the skin eruptions rapidly spread within a few days to involve the whole of her arms and trunk with a predilection of flexure areas (Pictures 2 and 3). In view of the recurrent flare, another course of IVIG was given and MMF was started by our dermatology team. Tense bullae continued to appear during the first weeks after the use of MMF. Steroid dosage was increased from prednisolone 30mg to 50mg daily, but this
was agreed by Ms Lam only after long rounds of discussions. Two days after the escalation of steroid use, there were no further new skin eruptions.

PARANEOPLASTIC PAMPHIGUS (PNP)

Paraneoplastic pemphigus is an autoimmune bullous disease first described in 1990 by Anhalt et al. It was observed that pemphigus occurred more frequently in patients with malignancy. PNP can precede, occur with or after the diagnosis of neoplasm.

Camisa and Helm revised the criteria for the diagnosis of paraneoplastic pemphigus in 1993. To reach a diagnosis, all three major and at least two minor criteria have to be fulfilled:

Major criteria
1. polymorphic cutaneous eruption
2. concurrent internal neoplasm
3. specific immunoprecipitation pattern on testing of serum

Minor criteria
1. histologic evidence of acantholysis
2. intercellular and basement-membrane staining with antibodies to IgG and C3 on direct immunofluorescence
3. staining of rat urothelium (antibodies to desmoplakin) on indirect immunofluorescence

The neoplasms most commonly associated with PNP include Non-Hodgkin’s lymphoma, chronic lymphocytic leukemia, as well as benign neoplasms such Castleman’s disease and thymoma.

Clinical presentation

The clinical presentation of PNP often involves the oral mucosa, the skin, and the eyes. Other organs such as the lungs may also be affected. Among all, mucositis is the principle feature of PNP, presenting sometimes as the earliest sign. It is often severe and extensive, and responds poorly to treatment.

Cutaneous features of PNP are characterized by their pleomorphism, which can range from pemphigus-like, pemphigoid-like, erythema-multiforme-like or lichen planus-like. Blisters often involve the upper trunk, head and neck and proximal extremities. Flexure areas, in particular, are sites of predilection. These cutaneous manifestations usually run a fluctuating course with the underlying neoplasm.

Conjunctivitis, which can be seen up to two thirds of the cases, can be severe and is potentially a threat to the underlying vision. Bronchiolitis obliterans, on the other hand, is relatively not as common and is a late presentation, but its presence harbors a grave prognosis overall.

Pathogenesis

The pathogenesis of PNP is still not well understood. Some had postulated that the expression of foreign tumor antigens cross-reacted to epidermal antigens, triggering the production of autoreactive clones of T lymphocytes. In vitro finding by some suggested that tumors produce autoantibodies against antigens in the epidermis. As in the case presented above, cytotoxic therapy has been implicated as a trigger of PNP.

Direct immunofluorescence study in PNP shows deposition of IgG and C3 on the surface of keratinocytes and basement membranes. On the other hand, indirect immunofluorescence study shows positive binding of serum antibodies to stratified epithelium substrate.

Treatment and Prognosis

To date, there is no definite effective treatment for PNP. Case experiences showed that steroid could induce partial remission. Other agents such as rituximab, MMF, cyclophosphamides etc immunosuppressants, are still under studied. It is believed that with the surgical excision of benign neoplasms, PNP can come to clinical remission. In malignancies, however, PNP can remain refractory and does not go in parallel to the response of malignancy to treatment.

OUR PALLIATIVE EXPERIENCE

The 'Difficult' Patient

During her hospital stay, Ms Lam was once seen as a 'strange' and 'difficult' patient, and was even labeled as having 'personality disorder'. She was observed to eat at odd hours and sleep with curtains drawn during visiting hours. At night she paced back and forth between her bed and the bathroom. She hardly ever interacted with other patients in ward and was preoccupied all day long with her own activities. At times she startled others by loudly singing hymns and prayers or hysterically crying all of a sudden. She had episodes of quarrelling with ward staffs over
practical issues, and often was noted not following instructions in the timing of medications. She declined nursing help for her skin care, but would frequently approach the nursing staffs demanding different kinds of dressing materials. Nearly every single change in her management plan required long and repeated rounds of discussions and negotiations.

Careful exploration, however, revealed that she had legitimate reasons behind all her odd behaviors. Her meal and medication-taking was restricted by her mucositis. Swallowing was only possible after morphine use and thorough mouthcare, which was a procedure that took her long hours every time. She described herself as being ‘ugly’ and thought that her appearance would scare other patients and visitors and hence her observed sleeping pattern. She would not talk and interact with other patients because of her oral discharge and pain. Her initial hesitancy towards chemotherapy was largely due to her fear of becoming a ‘chemo-patient’ with cachexia, alopecia and skin discoloration. In irony, she described herself as a prototype of their look now.

High level of anxiety was elicited with the mentioning of discharge from hospital, largely because of the need to ‘show’ herself to other villagers when walking past their houses before reaching her own. Chaplain, social worker and psychologist were invited to join the effort of addressing her concern. We worked with the patient and her sister in preparation for her discharge, getting her a wig and a jacket large enough to cover most of her body. We brainstormed with Lam the verbal accounts she were to give to her old friends and neighbors. Her support circle was reviewed. We encouraged her to continue joining the support group and Church activities. Ms Lam was finally discharged home.

The ‘Difficult’ Patient?-Looking Beyond

It is not uncommon that at times clinicians would come across patients whom we thought of as being ‘difficult’. This is especially likely to happen in the palliative care setting where patients and relatives are prone to stress and anxiety. Macdonald\(^1\) defined a difficult patient as ‘a person who does not assume the patient role expected by the healthcare professional, who may have beliefs and values or other personal characteristics that differ from those of the caregiver, and who causes the caregiver to experience self-doubt’. On the other hand, others had tried to characterize the clinicians who tend to see more patients as being ‘difficult’. Studies \(^2,3\) have found that doctors who are younger that 40 years old, who are of less experience, who work for more than 55 hours per week, who have greater number of patients with psychosocial problems or substance abuse, and who lack communication skills are more likely to report seeing ‘difficult’ patients.

A review by Lober et al\(^4\) showed that clinicians disliked difficult patients. These clinicians were more unenthusiastic about providing care and did not look forward to future interactions. They saw difficult patients as frustrating and time consuming. Others\(^5\) found that nurses marginalized unpopular patients, therefore decreasing the quality of care provided. It is evident that having patients seen as being ‘difficult’ will compromise both patient care quality and provider’s professionalism. Zane\(^6\) identified the most frequently used strategies in difficult clinical-patient situations. Among them included the suggestion to avoid labeling patient as difficult and to clarify factors that may be the root of the situation.

DISFIGUREMENT

Disfigurement is a problem very often faced by cancer patients, either due to the tumor itself or as a consequence of treatment received. This issue is well recognized among patients with head and neck tumors, breast cancers, or other gynecological cancers. Few, however, had commented on this topic in association with other cancer types or cancer-related problems and therapies.

Our case has exemplified the significance of disfigurement in the course of illness and how this issue could potentially be one of a burden to both patient and healthcare workers. The fear of disfigurement had not only hindered the patient from receiving treatment, but also affected her social and psychological well-being during her hospital experience and formed a barrier to her re-integration back to the community.

Price\(^12\) is one of the early writers who focused on body image. He has identified some potent threats to body image among people with cancer:
■ Pain and fatigue
■ Loss of physical control
■ Cancer or treatment which affects the face or sexual organs
■ Conditions that demand use of prosthesis that may be apparent
■ Alopecia
■ Hemorrhage
■ Breaching of body boundaries eg. catheter in situ

The Body Image Model as proposed by Price depicts the different dimensions that make up the body image, and how this image is interacting with self and the environment. According to this model, the body image is the result of the triangular forces formed from three components: body ideal, body reality and body presentation. The body ideal is the way we would like our body to look like, being influenced by the norms of our culture and society. The body reality is how our body is as it is seen unaltered objectively, while body presentation is how it is presented to the outside world.

This model offers a basis for use to work on when dealing with issues of disfigurement. In our case, Lam had the ‘body ideal’ being one with long hair, makeup and high heels on a body with a feminine contour. Her ‘body reality’, however, is a look of a ‘chemo-patient’ as she described it, which is further threatened by the multiple blisters and bullae covering nearly the whole of her body. This deviation from the norm of a female body shape was perceptually appreciated by Lam as a threat to the equilibrium. Coping strategies and social support were brought into play. Through working on her ‘body presentation’ with wigs and clothes, the distorted forces were brought back to balance such that Lam would carry a more positive body image in her interaction with the environment.

Disfigurement is a common occurrence in palliative care; its presence is disabling to the one who suffers from it, creating an array of emotional reactions. Body image care should be recognized as a distinctive type of care, encompassing physical, psychological and social aspects in it. We should identify those at risk, and care should start before the actual image alteration arises. Careful considerations should be made when planning treatment that may affect the body contour. Attention should be paid to maintain the patient’s nutritional status and healing capacity. Physiotherapy and occupational therapy help to maintain the mobility and functional status. Grief towards disfigurement should be recognized early and acknowledged. If necessary, psychological interventions including counseling, cognitive-behavioral therapy or other forms of psychotherapies could be applied. Empowerment to patient and relatives in discussions on coping strategies is an effective way of appreciating patient’s focus and preferences.

CONCLUSION

Paraneoplastic pemphigus is a disease of rare occurrence in malignancy. Its presence, as illustrated by our case, can bring about symptoms and conditions that may further complicate the palliative needs of the cancer patient. Paraneoplastic pemphigus is associated with significant physical pain, but it causes also considerable psychospiritual pain because of its refractory nature and its impact on the body image of the patient and the subsequent social isolation because of it. It is advisable to reckon body image care as a distinctive type of care in palliative care.

References

![Picture 1. A bulla at the venupuncture site](image1)

![Picture 2. Bullae in the right axilla.](image2)

![Picture 3. Multiple blisters on the neck](image3)