

Mindfulness Practices as Pain Relief Management on Nasopharyngeal Cancer Survivors
Awal Prasetyo¹, Hendro Prabowo²

¹Faculty of Medicine Diponegoro University, Indonesia

²Faculty of Psychology Gunadarma University, Indonesia

Author Note

Awal Prasetyo, Faculty of Medicine Diponegoro University, Indonesia.

Correspondence concerning this article should be addressed to Awal Prasetyo, Faculty of
Medicine Diponegoro University, Indonesia.

Jl. Prof. H. Soedarto, SH, Tembalang Semarang 50275. E-mail: awalpras@yahoo.com

ABSTRACT

Background: Chronic pain on Nasopharyngeal Carcinoma (NPC) survivors is challenging to manage, because of its significant psychological and cognitive behavioral element that's involved. Mindfulness practice helps to alter the visual analog scales (VAS) on those still be questioned.

Aim: This cohort pre and post test study were measuring the VAS from 3 patients with NPC chronic pain experience, that caused by standard therapy, who underwent serial mindfulness practice.

Method: Three cases of NPC survivors were followed during the diagnosis to the end of chemo and or radiotherapy for three to nine months. A few days after the diagnosis was enforced, VAS measurements were done as well as after they got serial mindfulness practice, including; breath work and body scan. The differences VAS of 5 NPC's pain sites (head & neck, corpus/torso, whole body, hands, feet) between pre and post-tests were analyzed.

Results: We found a significantly different (Independent samples T-test, $P < 0.05$) in VAS of 5 NPC's pain site from three cancer survivors in different ages.

Conclusion: We suggest that mindfulness practice may be used as standard pain relief management of NPC survivors.

Keywords: mindfulness practice, pain relief management, NPC survivors

INTRODUCTION

In, 1997, the Hong Kong Cancer Registry (2000) notes that nasopharyngeal carcinoma (NPC) has a high prevalence among the population of Southeast Asian countries, and tend to increase each year as well as in Indonesia. The increasing incidence of NPC was noted at Semarang city, the provincial capital of central java, Indonesia. The recent study by Puspita M., *et.al* (2012) reported by that there was an increase in the number of NPC patients from year 2002 until 2011, which at the beginning there was only 20 patients in 2002 but then increased to 95 in 2011. The study by Hidanti & Prasetyo. (2015) of Age Standardized Rates (ASR) on NPC from 2010-2014 in Semarang was also stated the increasing trend, ASR 0.03 to 0.12 respectively.

The primary treatment of NPC are external beam radiotherapy and chemotherapy. However, both modalities were not effective and satisfactory in case of late diagnosis and advance severity. Besides, chemo-radiation is associated with a higher incidence of complications, i.e. the pain (Teo PM, *et al.* 1998; Leung TW, *et al.* 2000; Chua DT, *et al.* 2003). The increasing incidence and the limitations of the treatment of Nasopharyngeal Carcinoma (NPC) need for integrative cancer care, especially in the management of pain.

The pain symptoms can be evaluated by different rating scales, including numerical (e.g., 0–10), categorical (e.g., mild, moderate, severe), or visual (i.e., visual analogue scale or VAS). A visual analogue scale is a line, usually measuring 10 cm, with descriptors at each end (e.g., good to bad, none to severe). The respondents place a mark along the line indicating their subjective experience. The score is measured as the distance of the mark from one end of the line. Usually, the line does not have markings, words, or numbers along it. A visual analogue scale has been described as simple, highly sensitive, and reliable rating scales for subjective experiences (McCormack, H.M., *et al.* 1988). The main advantage of a VAS is that respondents may indicate any place along the line rather than be restricted by categories or numbers. A visual analogue scale have been used to assess cancer quality of life (QOL) evaluation, especially for measuring the score of pain using single-item QOL VAS that correlate well with multidimensional questionnaires (Khalil, HS., *et al.* 2003; de Boer, AG., *et al.* 2004; Sloan, JA., *et al.* 2002). A visual analogue scale are responsive to radio-chemotherapy-related changes over time and global ratings of change (Bernhard, J., *et al.* 2001; de Boer, A.G., *et al.* 2004). Single-item VAS have shown improved QOL with pain relief (Stockler, M., *et al.* 2004; Chang, VT., *et al.* 2002) stable QOL in patients in hospice care (Bretscher, M. *et al.* 1999), and response to structured intervention during radio-chemotherapy (Rummans, T.A., *et al.* 2006). Single-item scales leave the definition of QOL to the individual respondent.

Breath work is a psychotherapeutic, meditative activity that involves the conscious alteration of natural breathing patterns. Breath work has been associated with other body-centric practices, such as yoga, Tai Chi, and Qigong. As is the case with this other practices that emphasize body consciousness, breath work is used to help reduce stress, clear the mind, focus on the moment at hand, and gain personal, psychological, and spiritual insights. Under the guidance and supervision of a qualified breath work therapist, breath work patients may speed, slow, or otherwise alter their breathing patterns as a means of calming, focusing, and centering themselves. Common forms of breath work include Breath Awareness, Clarity Breath work, Conscious Breathing, Holotropic Breath work, Rebirthing Breath work, Shamanic Breath work, Transformational Breath work, Vivation Breath work, and Zen Yoga Breath work.

The body scan has proven to be an extremely powerful and healing form of meditation. It forms the core of the lying down practices that people train in Mindfulness-Based Stress Reduction. It involves systematically sweeping through the body with the mind, bringing an affectionate, openhearted, interested attention to its various regions, customarily starting from the toes of the left foot and then moving through the entirety of the foot-to sole, the heel, the top of the foot-then up the left leg, including in turn the ankle, the shin and the calf, the knee and the kneecap, the thigh in its entirety, on the surface and deep, the groin and the left hip, then over to the toes of the right foot, the other regions of the foot, then up the right leg in the same manner as the left. From there, the focus moves into, successively, and slowly, the entirety of the pelvic region, including the hips again, the buttocks and the genitals, the lower back, the abdomen, and then the upper torso-the upper back, the chest and the ribs, the breasts, the heart and lungs and great vessels housed within the rib cage, the shoulder blades floating on the rib cage in back, all the way up to the collarbones and shoulders. From the shoulders, we move to the arms, often doing them together, starting from the tips of the fingers and thumbs and moving successively through the fingers, the palms, and backs of the hands, the wrists, forearms, elbows, upper arms, armpits, and shoulders again. Then we move in to the neck and throat, and finally, the face and head.

Mindfulness is state of active, open attention on the present, observe the thoughts and feelings from a distance, without judging them good or bad. Instead of letting the life pass you by, mindfulness means living in the moment and awakening to experience. Mindfulness exercise actually changes the way the mind perceives pain so that it's more bearable. It is a natural and effective way to ease physical pain. The idea of being mindful of pain may seem counter-intuitive. Most people want to forget about their pain-they want to escape it, run away from it, wishing they could ignore it or get rid of it somehow. The problem is-ironically-that by fighting and struggling against it, and even by trying to ignore it. There will be a creation within our self a state of 'resistance to what is' and that means stress. Although it may take a little practice, it is possible to be in a relatively calm and content emotional state even when in physical pain.

This case study were done at three cases of NPC patients who underwent their radio-chemotherapy treatment. All were done a serial transpersonal therapy, i.e.; breath work, body scan, and mindfulness, as well as the differences between pre and post test were analyzed.

METHOD

Three cases of NPC survivors were followed during the diagnosis to the end of standard therapy for three to nine months in a few days after the diagnosis was enforced, the measurements of VAS and modified QOL validated traditional Chinese version of the European Organization for Research and Treatment of Cancer core questionnaire and head and neck module were done. All were done a serial transpersonal therapy, i.e.; breath work, body scan, and mindfulness, as well as the differences between pre and post test were analyzed.

Measuring cancer pain relief using visual analog score (VAS)

The pain VAS is a unidimensional measure of pain intensity which has been widely used in diverse adult populations, including those with cancer pain (McCormack, HM., *et al*, 1988). The pain VAS is a continuous scale comprised of a horizontal (HVAS) or vertical (VVAS)

line, usually 10 centimeters (100 mm) in length, anchored by 2 verbal descriptors, one for each symptom extreme, which is time period for reporting and verbal descriptor anchors have varied widely in the literature depending on intended use of the scale (Burckhardt, C.S & Jones, KD., 2003). The pain VAS is a single-item scale. For pain intensity, the scale is most commonly anchored by “no pain” (score of 0) and “pain as bad as it could be” or “worst imaginable pain” (score of 100 [100-mm scale]) (Jensen, MP., *et al*, 1986; Ferraz, MB., *et al*, 1990). To avoid clustering of scores around a preferred numeric value, numbers or verbal descriptors at intermediate points are not recommended. Recall periods for items were varies, but all respondents were asked to report “current” pain intensity or pain intensity “in the last 24 hours after the treatment. The measurement of VAS used as a graphic rating scale, a 10 cm base line, that visualized from 0 (no pain) to 10 (pain as bad as it could possibly be). The VAS can be described on 0 to 10 numeric pain intensity scale or in order to clinical practice it may be converted to 6 simple descriptive pain intensity scale, that are; score 0 (no pain), score 2 (mild pain), score 4 (moderate pain), score 6 (severe pain), score 8 (very severe pain), and score 10 (worst possible pain).

Measuring cancer pain site

Site checklists method was used for assess pain site in this research, that were categorized into 5 sections; 1) head and face (face, tongue, nose, mouth, ears, eyes, head), 2) corpus/torso (upper abdomen, lower abdomen, back, chest, breath, heart, neck, throat, shoulder), 3) whole body (body, skin, blood flow, body temperature), 4) hands (upper arms, lower arms, palms, fingertips), and 5) feet (sole of feets, ankles, thighs, toes).

RESULTS

Three cases of NPC patients were observed. First case was a 31 years old woman who had nasopharyngeal carcinoma type WHO III stage 3, second case was a 42 years old man with NPC type WHO III stage 3, and third case was a 21 year old man with NPC type WHO III stage 3.

Table 1. Visual analog score of self transformational pain relief of NPC cases

No. of cases	NPC's cancer pain site				
	Head & face	Corpus/torso	Whole body	Hands	Foots
Case-1					
Before treatment	9.4	8.0	4.5	3.25	2.0
After treatment	4.0	2.6	2.5	0.75	0.25
P-value	0.00*	0.00*	0.003*	0.007*	0.007*
Case-2					
Before treatment	8.7	8.1	3.75	1.75	2.0
After treatment	2.6	2.6	0.75	0.5	0.5
P-value	0.00*	0.00*	0.004*	0.142	0.478*
Case-3					
Before treatment	9.1	8.8	4.5	3.25	1.5
After treatment	3.4	2.8	1.25	1.0	0.5
P-value	0.00*	0.00*	0.003*	0.058	0.050

*Independent samples T-test, $P < 0,05$ (significant)

All subjects had a standard management of radio-chemotherapy and a serial training on transpersonal psychological intervention. All subjects were also measured the VAS as well as modified QOL validated traditional Chinese version of the European Organization for Research and Treatment of Cancer core questionnaire.

The VAS score before and after treatment were demonstrated several significances especially for the NPC's cancer pain site on head and face, corpus/torso and whole body ($P<0.05$) (Table 1).

DISCUSSION

Measuring cancer pain relief using VAS scale is an alternative to assessing change in pain intensity pre and post-treatment. However, even though pain relief ratings are more sensitive to the effects of treatment, VAS measurement is easier in clinical application. On the surface, many clinicians might assume that a rating of pain relief after a treatment represents the same thing as a pre-treatment to post-treatment decrease in pain intensity. If this assumption were true, so the patients should asked to rate pain relief after their self transformational pain relief for cancer pain, to assessing change in pain intensity pre-treatment to post-treatment.

In the case of NPC's subjects that having radio-chemotherapy modalities which suffering pain, self transformational treatment were significantly reduce the pain ($P<0.05$). The data from this study do suggest the potential possibility of self transformational treatment in NPC's pain relief.

This study were also demonstrated the VAS differentiation on NPC's pain site. The study has been performed to evaluate and validate measures of pain site in NPC patients. Of the 2 methods most commonly used to assess pain site in pain research, pain drawing and site checklists, and this research using site checklist, consist of 5 sections; 1) head and face (face, tongue, nose, mouth, ears, eyes, head), 2) corpus/torso (upper abdomen, lower abdomen, back, chest, breath, heart, neck, throat, shoulder), 3) whole body (body, skin, blood flow, body temperature), 4) hands (upper arms, lower arms, palms, fingertips), and 5) foots (sole of foots, ankles, thighs, toes). The findings from this research indicate that criterion for NPC's pain site checklist correspondence with anatomic locations and associated with specific cancer diagnoses and through their association with pain intensity. Whether patient-rated pain site measures are useful in patients with cancer remains to be seen. However, research among patients with chronic pain not associated with cancer supports pain site as a distinct pain dimension that may play an important role in patient functioning over and above the effects of pain intensity alone. For example, the number of pain sites has been shown to have moderate associations with disability, pain intensity/interference composite scores, and return to work in persons with chronic pain (Johnson, C., 2005; Langley, GB., *et al*, 1985; Hush, JM., *et al*, 2010). Given the potential importance of NPC's pain site (and number of pain sites) to patient functioning, there is a need for further research to examine the validity and usefulness of pain site measures as measures of treatment outcome, pain distribution description, or as predictors of other important outcomes or variables in persons with cancer pain.

Instrument selection

Several factors affect the selection of an instrument for measuring pain relief of NPC's cases. Population characteristics (including age, diagnosis, and performance status) affect completion rates and whether a disease-specific or general questionnaire is appropriate.

In research, the definition and hypothesis influence this choice, particularly whether specific domains are important or likely to change with intervention. The choice of scale (VAS, numerical, or categorical) depends upon the data sensitivity required and the desired completion rates. Instruments that appear to be relevant to clinical practice on pain evaluation include single-item VAS that was done by this study. Instruments with numerical or categorical scales may be easier to complete and score, and changes may be more relevant to clinical practice. Measurement frequency is important; single-item VAS may be useful for frequent measures and may avoid patient burden. Single-item VAS instruments may be worthwhile in clinical trials (especially longitudinal ones) for clinical screening (pain, depression, advanced cancer) (Sloan, J.A., *et al.* 2002). In symptom relief trials single-item QOL VASs assesses the impact of symptoms, are relevant and may best represent what the patient is experiencing, using a score range of only 0-10 which is needed. This study using QOL VAS which ranging score 0-10 and that would be converted into clinical application by using 6 categorical simple descriptive pain intensity scale, that are; score 0 (no pain), score 2 (mild pain), score 4 (moderate pain), score 6 (severe pain), score 8 (very severe pain), and score 10 (worst possible pain).

The VAS are said to be more sensitive to subjective changes than are numerical or categorical scales, as well as high sensitivity in NPC's pain measurement. Studies of QOL in cardiac and respiratory failure have demonstrated a 7-point verbal descriptor scale had equal sensitivity to a VAS (Guyatt GH, *et al.* 1987; Jaeschke R, *et al.* 1989) validation of a 0-10 numerical LCSS demonstrated good agreement with a VAS (Hollen P., *et al.* 2005). Comparison of a VAS in the PROSQOLi with equivalent Likert scales of the EORTC QLQ-C30 demonstrated superior sensitivity of the VAS for pain and other physical symptoms (Stockler, M.R., *et al.* 1998).

Conclusion

Single-item VAS facilitate an individual definition and are useful in advanced or palliative populations and longitudinal studies. It is sensitive and responsive to change with time and treatment. This study inferred that self transformational pain relief measured by VAS is used as standard management on NPC survivors.

REFERENCES

- Bernhard, J., Sullivan, M., Hüorny, C., Coates, A.S., Rudenstam, C.M. (2001). Clinical relevance of single item quality of life indicators in cancer clinical trials. *Br J Cancer*, 84, 1156-1165.
- Bretscher, M., Rummans, T., Sloan, J., *et al.* (1999). Quality of life in hospice patients: a pilot study. *Psychosomatics*, 40, 309-313.
- Burckhardt CS, Jones KD. (2003). Adult measures of pain: The McGill Pain Questionnaire (MPQ), Rheumatoid Arthritis Pain Scale (RAPS), Short-Form McGill Pain Questionnaire (SF-MPQ), Verbal Descriptive Scale (VDS), Visual Analog Scale (VAS), and West Haven-Yale Multidisciplinary Pain Inventory (WHYMPI). *Arthritis Rheum*, 49, S96-104.
- Chang, V.T., Hwang, S.S., Kasimis, B. (2002). Longitudinal documentation of cancer pain management out-comes: a pilot study at a VA medical center. *J Pain Symptom Manage*, 24, 494-505.

- Chua, D.T., Sham, J.S., Kwong, P.W., et al. (2003). Linear accelerator-based stereotactic radiosurgery for limited, locally persistent, and recurrent nasopharyngeal carcinoma: efficacy and complications. *Int J Radiat Oncol Biol Phys*, 56,177-183.
- de Boer, A.G., van Lanschot, J.J., Stalmeier, P.F., et al. (2004). Is a single-item visual analogue scale as valid, reliable and responsive as multi-item scales in measuring quality of life? *Qual Life Res*,13,311-320.
- Ferraz MB, Quaresma MR, Aquino LR, Atra E, Tugwell P, Goldsmith CH. Reliability of pain scales in the assessment of literate and illiterate patients with rheumatoid arthritis. *J Rheumatol*,17,1022-4.
- Gallagher, E.J., Liebman, M., Bijur, P.E. (2001). Prospective validation of clinically important changes in pain severity measured on a visual analog scale. *Ann Emerg Med*, 38,633-638.
- Guyatt, G.H., Townsend, M., Berman, L.B., Keller, J.L. (1987). A comparison of Likert and visual analogue scales for measuring change in function. *J Chronic Dis*, 40,1129-1133.
- Hidanti, ML., Prasetyo A. (2015). Head and Neck Cancer Trends in Semarang: An analysis of ASR and ASCR.. Karya Tulis Ilmiah S1 FK Universitas Diponegoro,
- Hong Kong Cancer Registry. (2000). Cancer Incidence and Mortality in Hong Kong, 1997. *Hong Kong: Hospital Authority: 5*.
- Hollen, P., Gralla, R. (2000). Clinical vs statistical significance: using the LCSS quality of life instrument and Karnofsky Performance Status (KPS) to approach the problem in patients with non-small cell lung cancer (NSCLC). *Proc Am Soc Clin Oncol*,19,2510.
- Hollen, P.J., Gralla, R.J., Kris, M.G., McCoy, S., Donaldson, G.W., Moinpour, C.M. (2005). A comparison of visual analogue and numerical rating scale formats for the Lung Cancer Symptom Scale (LCSS): does format affect patient ratings of symptoms and quality of life? *Qual Life Res*, 14,837-847.
- Hush, J.M., Refshauge, K.M., Sullivan, G., De Souza, L., McAuley, J.H. (2010). Do numerical rating scales and the Roland-Morris Disability Questionnaire capture changes that are meaningful to patients with persistent back pain? *Clin Rehabil*, 24,648-57.
- Jaeschke, R., Singer, J., Guyatt, G.H. (1989). Measurement of health status: ascertaining the minimal clinically important difference. *Control Clin Trials*, 10,407-415.
- Jensen, MP., Karoly, P., Braver, S. (1986). The measurement of clinical pain intensity: a comparison of six methods. *Pain*, 27,117-26.
- Johnson, C. (2005). Measuring pain. Visual analog scale versus numeric pain scale: what is the difference? *J Chiropr Med*, 4,43-4.
- Khalil, H.S., Feldman, M., Bridger, M.W. (2003). A simple assessment of quality of life in head and neck cancer patients: what can it tell us? *Rev Laryngol Otol Rhinol (Bord)*,124,211-214.
- Langley, G.B., Sheppard, H. (1985). The visual analogue scale: its use in pain measurement. *Rheumatol Int*, 5,145-8.
- Leung, T.W., Tung, S.Y., Sze, W.K., et al. (2000). Salvage radiation therapy for locally recurrent nasopharyngeal carcinoma. *Int J Radiat Oncol Biol Phys*,48,1331-1338.
- McCormack, H.M., Horne, D.J., Sheather, S. (1988). Clinical applications of visual analogue scales: a critical review. *Psychol Med*,18,1007-19.
- Puspita, M., Prasetyo, A., Putranto, BE. (2012). Age Standardized Rate (ASR) and Age Standardized Cancer Ratio (ASCR) of Nasopharyngeal Cancer in Kariadi Central Hospital During 2002-2011. Karya Tulis Ilmiah S1 FK Universitas Diponegoro.

- Rummans, T.A., Clark, M.M., Sloan, J.A., *et al.* (2006). Impacting quality of life for patients with advanced cancer with a structured multidisciplinary intervention: a randomized controlled trial. *J Clin Oncol*, 24, 635-642.
- Sloan, J.A., Aaronson, N., Cappelleri, J.C., Fairclough, D.L., Varricchio, C. Clinical Significance Consensus Meeting Group. (2002). Assessing the clinical significance of single items relative to summated scores. *Mayo Clin Proc*, 77, 479-487.
- Stockler, M., Vardy, J., Pillai, A., Warr, D. (2004). Acetaminophen (paracetamol) improves pain and well-being in people with advanced cancer already receiving a strong opioid regimen: a randomized, double-blind, placebo-controlled cross-over trial. *J Clin Oncol*, 22, 3389-3394.
- Teo, P.M., Kwan, W.H., Chan, A.T., *et al.* (1998). How successful is high-dose (≥ 60 Gy) reirradiation using mainly external beams in salvaging local failures of nasopharyngeal carcinoma? *Int J Radiat Oncol Biol Phys*, 40, 897-913.
- Stockler, M.R., Osoba, D., Goodwin, P., Corey, P., Tannock, I.F. (1998). Responsiveness to change in health-related quality of life in a randomized clinical trial: a comparison of the Prostate Cancer Specific Quality of Life Instrument (PROSQOLI) with analogous scales from the EORTC QLQ-C30 and a trial specific module. European Organization for Research and Treatment of Cancer. *J Clin Epidemiol*, 51, 137-145.
- Sloan, J. (2002). Asking the obvious questions regarding patient burden. *J Clin Oncol*, 20, 4-6.
- Sloan, J.A., Aaronson, N., Cappelleri, J.C., Fairclough, D.L., Varricchio, C.; Clinical Significance Consensus Meeting Group. (2002). Assessing the clinical significance of single items relative to summated scores. *Mayo Clin Proc*, 77, 479-487.

CORRELATION BETWEEN EXPRESSION OF IL-10 AND FASL (CD95L) WITH CLINICAL STAGE OF NASOPHARYNGEAL CARCINOMA WHO TYPE III

Agung Dinasti P, Fitri Heryanti, Lina Lasminingrum

Tumor progression including nasopharyngeal carcinoma (NPC) influenced by the immune system. T lymphocytes play an important role in immune surveillance against NPC. There are several factors that produced by tumor cells or tumor environment can decrease the expression and activity of tumor infiltrating T lymphocytes. It can be used as mechanisms for tumor cells escape from the immune system. These factors among others are the expression of immunosuppressive molecules such as IL-10 that can interfere tumor antigen presentation to T lymphocytes and expression of FasL on tumor that cause apoptosis of tumor infiltrating lymphocytes.

This study aims to reveal the relationship between the expression of IL-10 and FasL with clinical staging of type III WHO NPC.

This research is an analytic observational study with cross-sectional design. The study was conducted at the Otorhinolaryngology Head and Neck Surgery Department and Pathology Anatomy, dr. Hasan Sadikin Hospital Bandung from July to August 2015, followed by 23 subjects which were done immunohistochemistry examination from WHO type III nasopharyngeal carcinoma patients.

Results of the analysis about the correlation between expression of IL-10 and FasL with clinical stage of type III WHO NPC revealed p value > 0.05 .

Conclusion: There was no significant correlation between the expression of IL-10 and FasL with clinical stage of NPC type III WHO.

Keyword: nasopharyngeal carcinoma, IL-10, FasL, clinical staging

MINDFULNESS PRACTICE AS PAIN RELIEF MANAGEMENT ON NASOPHARYNGEAL CANCER SURVIVORS

Awal Prasetyo¹, Hendro Prabowo²

¹Faculty of Medicine Diponegoro University, Indonesia

²Faculty of Psychology Gunadarma University, Indonesia

Background: Chronic pain on Nasopharyngeal Carcinoma (NPC) survivors is challenging to manage, because of its significant psychological and cognitive behavioral element that's involved. Mindfulness practice helps to alter the visual analog scales (VAS) on those still be questioned. **Aim:** This cohort pre and post test study were measuring the VAS from 3 patients with NPC chronic pain experience, that caused by standard therapy, who underwent serial mindfulness practice. **Method:** Three cases of NPC survivors were followed during the diagnosis to the end of chemo and or radiotherapy for three to nine months. A few days after the diagnosis was enforced, VAS measurements were done as well as after they got serial mindfulness practice, including; breath work and body scan. The differences VAS of 5 NPC's pain sites (head & neck, corpus/torso, whole body, hands, feet) between pre and post-tests were analyzed.

Results: We found a significantly different (Independent samples T-test, $P < 0.05$) in VAS of 5 NPC's pain site from three cancer survivors in different ages.

Conclusion: We suggest that mindfulness practice may used as standard pain relief managements of NPC survivors. **Keywords:** mindfulness practice, pain relief management, NPC survivors

Symposium 15 (Thyroid) Chair: Kyung Tae, Co-chair: Erwin Daniel Julian		
1	Mangupura 14.30 - 15.30	Ziv Gil (Molecular Modulation of Radioactive Iodine Uptake in Papillary Carcinoma of the Thyroid)
2		Devendra Chaukar (Management of Pediatric Thyroid Ca)
3		Hapsari Indrawati (The Role of 18F-FDG PET Scan on Thyroid Carcinoma)
Symposium 16 (Extraordinary Tumors) Chair: Alok Thakar , Co-chair: Eka Yuda		
1	Bougenville 14.30 - 15.30	Choakchai M (Carotid Body Tumors)
2		Kwang Hyun Kim (Management of Neurogenic Tumors in Head and Neck)
3		Ashok Mohan Shenoy (Total Laryngopharyngo-esophagectomy with Gastric Pull Up – a Surgical Procedure Revisited)
Symposium 17 (Palliative Approach in Head and Neck Cancer) Chair: Dhair: Drajat Ryanto Suardi, Co-chair: Nut Niyomudomvattana		
1	Hibiscus 14.30 - 15.30	Noorwati Sutandyo (Expression of circulating miR-206 in patients with head and neck cancer and its association with cancer cachexia)
2		Fiastuti Witjaksono (Malnutrition in Head and Neck Cancer)
3		Melonie Adia Nance (The New HPV Staging System or use of Palliative Care in Oncology Patients)
Accepted Paper 1 Chair: Suyatno		
1	Orchid 14.30 - 15.30	Agung Dinasti P (Correlation Between Expression of IL-10 and FasL (CD95L) with Clinical Stage of Nasopharyngeal Carcinoma WHO Type III)
2		Awal Prasetyo (Mindfulness Practice as Pain Relief Management on Nasopharyngeal Cancer Survivors)
3		Cita Herawati (Expressions of p53 and c-Myc Proteins in Locally Advanced Nasopharyngeal Cancer Patients and Their Associations with Plasma miR-21)
4		Riswan Arisandi (Evaluation of nutritional status on the survival of patients with nasopharyngeal carcinoma)
5		Imam Prabowo (The Expression and Correlation of IL-35 and CD 8+ in Nasopharyngeal Carcinoma Undifferentiated Type)
6		Camelia Herdini (Pediatric Nasopharyngeal Carcinoma: A review of 17 cases over 5 years at Sardjito Hospital, Yogyakarta, Indonesia)
7		Hamsu Kadriyan (The Expression of bcl-2 Protein in patients with nasopharyngeal cancer in West Nusa Tenggara, Indonesia)
8		Anggraini Dwi Sensusiati (Corelation Between Location and Staging of Laryngeal Carcinoma with Arytenoid Cartilage Condition on CT Scan)
Plenary Session 3 (Tumor Margin and Hypoxia) Chair: Jeannette S Matsuo, Co-chair: Chaerani Siregar		
1	Mangupura 15.30 - 16.30	Chaerani Siregar (Resection of Primary Cancer Based on Pathologic Base, How can we get the Safe Margin?)
2		Soehartati (How Can We Overcome Hypoxia in Radiotherapy for Head and Neck Cancer?)

Surgical nuances to minimize treatment sequelae for HNC	26
Anil D'Cruz	
HNC clinical care pathway integrating pain and palliation	26
Brenda Villegas	
Unsedated office procedures for rehabilitation of patients with head and neck cancer	27
Lindsay Reder	
Rehabilitation of head and neck cancer patients- A Mind-Body-Social Approach	27
Melody ouyoung	
Molecular pathogenesis of dysphagia and dysphonia in head and neck cancer	28
Uttam Sinha	
Prevention of recurrence head and neck cancer to maximize outcome	28
Uttam Sinha	
Outcome and Voice Rehabilitation of Laryngectomized Patients	29
Avatar Singh	
The Arts of Head and Neck Cancer Management Research and Training	29
Ziv Gil	

VIDEO SESSION

The Role Of Neck Dissection In Clinically Negative Neck In Oral Cavity Cancer	30
Alfredo pontejos	
Reconstruction of voice tube after total Pharyngolaryngectomy	30
Yi-shing leu -	
Supracricoid laryngectomy: how i do it	31
Alfredo pontejos	
Wide vertical hemipharyngolaryngectomy	31
Kyung tae	

INSTRUCTIONAL COURSE

Dysphagia & Aspiration Problem In Head & Neck Cancer Patients The Role Of Flexible Endoscopy Evaluation Of Swallowing (Fees)	32
Susyana Tamin	
Basic Protocol Of Voice Assessment	32
Marina Mat Baki	
Comparative Voice Analysis Using Vhi In Early Glottis Cancers Treated By Transoral Laser Microsurgery Vs External Beam Radiation Therapy	33
Ashok Shenoy	
Rehabilitation After Laryngeal Surgery	33
Mangalpady Poornima Shenoy	
Stem Cells In Reanimation Of The Facial Nerve	34
Norhafiza Mat Lazim	
Dysphonia And Dysphagia In Head And Neck Cancer Patien.Comprehensive Rehabilitation	34
Nury Nusdwiningtyas	

ACCEPTED PAPER

Correlation Between Expression of IL-10 and FasL (CD95L) with Clinical Stage of Nasopharyngeal Carcinoma WHO Type III	35
Agung Dinasti Permana	
Mindfulness Practice as Pain Relief Management on Nasopharyngeal Cancer Survivors	35
Awal Prasetyo	
Expressions of p53 and c-Myc Proteins in Locally Advanced Nasopharyngeal Cancer Patients and Their Associations with Plasma miR-21	36
Cita Herawati	
Influence Of Body Mass Index On The Survival Pf Patients With Locally Advanced Nasopharyngeal Carcinoma	36
Riswan Arisandi	