



RESEARCH ARTICLE

CAN VISUAL ANALOGUE SCALA (VAS) BE USED IN PAIN DETERMINATION AND PALLIATION IN MULTIPLE MYELOMA PATIENTS ?

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ARTICLE INFO

Received 4th January, 2017  
Received in revised form 20th February, 2017  
Accepted 24th March, 2017  
Published online 28th April, 2017

Keywords:

Multiple myeloma, visual analogue scale, bone disease, pain

ABSTRACT

Multiple myeloma is a hematological malignancy seen with clonal proliferation of plasma cells and characterized by bone destruction. Most of the patients are elderly group and compression fractures due to lytic lesions and pain is very important in terms of quality of life and daily activity. Forty-two patients diagnosed with multiple myeloma were included in the study. Its status on the VAS pain scale, patients were asked to be descriptive mark. All patients of mean VAS value of 4.17 ( $\pm 2.95$ ) that were observed. The total average VAS in 18 patients using analgesics 6.87 ( $\pm 1.35$ ), while the not using of analgesics in 24 patients with an average VAS scores of 2.14 ( $\pm 1.65$ ) that were observed ( $p < 0.05$ ). In conclusion determining the severity of pain and effective control is a point that should be noted. Repeating of VAS the follow-up of these patients could help to effective pain palliation

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INTRODUCTION

Multiple myeloma is a hematological malignancy seen with clonal proliferation of plasma cells in the bone marrow and characterized by bone destruction, anemia, renal and immunological impairment. These complications may lead to severe impairment of the quality of life of myeloma patients and may deteriorate their life expectancy (1). Osteolytic bone disease is one of the most prominent features of myeloma, and is present in up to 80% of patients at diagnosis. Most of the patients are elderly group and compression fractures due to lytic lesions and pain is very important in terms of quality of life and daily activity (2). Multiple myeloma has been reported to be associated with polyneuropathy which adversely affects the life of the patient.

Also vincristine and especially new agents thalidomide and bortezomib used in therapy is associated with polyneuropathy. In order to increase the quality of life of patients with pain palliation effective monitoring it is very important. Pain cannot be measured in numbers. In order to determine the severity of the pain visual analogue scales (VAS) are commonly used in clinical trials and studies. The VAS is a scale which is 10 cm long straight, marked at each end with labels. The horizontal version is the most common. In order to determine the severity of the pain, patients are asked to place a mark on the line at a point where the anchors are 'no pain' and 'severe pain'. Scores are noted in millimetres thus giving a total score range of 0-100

millimetres (3). VAS used by different departments such as rheumatology, orthopedics, physical therapy neurosurgery is a measure that identifies the digital form based on visual (4-8). In this study, we aimed to evaluate the use of VAS in the identification of pain in multiple myeloma patients and pain palliation.

MATERIALS AND METHODS

Forty-two patients diagnosed with multiple myeloma were included in the study. Demographic data and analgesic use were recorded. Its status on the VAS pain scale, patients were asked to be descriptive mark. These values were then digitized by making measurements. Divided into groups according to whether they use analgesic evaluation was performed.

Statistical analysis

The data were analyzed using SPSS version 17.0. Parametric or non-parametric tests were used depending on the range. P values of less than 0.05 were regarded as significant.

RESULTS

Twenty-four of the patients were women, 18 were men and the median age was 65 with age ranges from 41 to 83 years old. According to multiple myeloma types 11 patients IgG / kappa, 8 patients with IgG / lambda, 8 patients with IgA / kappa, 3 patients with IgA / lambda, 8 patients kappa light chain, it was seen in 4 patients lambda light chain subtypes (Table 1). All

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patients of mean VAS value of 4.17 ( $\pm$  2.95) that were observed. The total average VAS in 18 patients using analgesics 6.87 ( $\pm$  1.35), while the not using of analgesics in 24 patients with an average VAS scores of 2.14 ( $\pm$  1.65) that were observed ( $p < 0.05$ ).

**Table 1.** Demographic characteristics of the patients

Characteristics	
Gender F/M	24 / 18
Age	65* (41-83)
Multiple myeloma subtypes	
IgG/Kappa	11
IgG/Lambda	8
IgA/Kappa	8
IgA/Lambda	3
Kappa Light Chain	8
Lambda Light Chain	4

F: Female M: Male \*Median

## DISCUSSION

Multiple myeloma is a malignancy of monoclonal plasma cells and bone involvement is very common. Lytic lesions are a characteristic feature of multiple myeloma, which may be complicated with pathologic fractures (9). One of the most important causes of mortality and morbidity in multiple myeloma is bone disease. Osteolytic bone lesions cause bone pain, hypercalcemia, pathological fractures, and decreased function. Osteopenia is also a common finding that leads to pain and bone fracture (10). Also multiple myeloma has been reported to be associated with polyneuropathy in 11-20 % of patients at the time of diagnosis. It is usually graded as degree 1 sensory polyneuropathy. Although polyneuropathy associated with myeloma does not constitute a clinically significant problem, vincristine used in therapy and especially new agents (thalidomide and bortezomib) that completely change the multiple myeloma treatment approach in the 2000s. The most common side effects of thalidomide and bortezomib is polyneuropathy which adversely affects the life of the patient. Today, polyneuropathy due to treatment agents in multiple myeloma patients has an important role in managing side effects (11-13). Patients with chronic pain can give variable responses when measuring pain intensity. Visual analog scale (VAS) helps to determine pain severity in patients who are not capable of measuring pain (14).

In conclusion due to pain activities of daily living and quality of life is impaired. Determining the severity of pain and effective control is a point that should be noted. VAS used by different departments also seems to be used in clinical trials in multiple myeloma patients. Repeating of VAS the follow-up of these patients could help to effective pain palliation.

**Conflict of Interest:** No conflict of interest was declared by the authors.

**Financial Disclosure:** The authors declared that this study received no financial support.

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