

## 雙磷酸鹽在乳癌併有骨骼轉移病人之使用

### Clinical Use of Bisphosphonates in Patients with Breast Cancer and Bone Metastases

#### 中文摘要

美國臨床癌症協會的準則認為對有骨頭轉移的乳癌病人給予雙磷酸鹽藥物，雖然價錢上較為昂貴且無法有效延長存活率，但就減少病人不適，改善生活品質而言，確實是一種對病人有意義的支持療法。本研究回溯 1990 年 4 月至 2000 年 4 月間在某家治癌中心同時患有乳癌和骨頭轉移女性病人的就醫記錄。回溯時間為骨頭轉移開始至 2003 年 12 月。本研究的目的是在於了解雙磷酸鹽藥物在骨頭轉移的乳癌病人臨床上的使用情形。

研究結果發現僅有 90 名病人(31%) 接受雙磷酸鹽藥物治療(用藥組)，而有 198 名病人(69%)未接受雙磷酸鹽藥物治療。口服 clodronate 的病人佔大多數，而有超過半數以上的病人治療的時間小於 6 個月。另外，用藥的病人中，骨骼轉移至用藥的時間中位數為 12.2 月。與美國臨床癌症協會的準則相比較，用藥時機較延遲，治療時間也較短。在調整兩組病人基本資料的差異後，用藥組病人與非用藥組病人發生病理性骨折、脊椎骨折、非脊椎骨折、骨頭手術治療、和脊柱壓縮的相對危險並無統計上的差異。造成上述結果的原因可能與雙磷酸鹽藥物的治療時機與療程長短有關。然而，儘管雙磷酸鹽藥物的使用時機、使用時間、使用種類上有所不同，用藥組仍明顯延長 2 年內發生第一次脊椎骨折的時間(23.1 vs 20.1,  $p=0.03$ )。本研究的結果顯示，乳癌合併骨骼轉移的病人使用雙磷酸鹽藥物的比例偏低，用藥時機普遍延遲，治療時間也明顯不足，雖然如此，雙磷酸鹽藥物的治療仍可有效延長第一次脊椎骨折發生的時間。

#### 英文摘要

The 2000 American Society of Clinical Oncology (ASCO) guideline stated that bisphosphonates can provide a meaningful supportive, albeit expensive and non-life-prolonging benefit to many patients with bone metastases.

This was a retrospective medical chart review of patients with breast cancer and bone metastases between April 1990 and April 2000 to evaluate the clinical use of bisphosphonate therapy in patients with breast cancer and bone metastases. Data were collected from the time of bone metastasis being diagnosed to December 2003.

Only 90 patients were treated with bisphosphonates (the BP users), however, 198(69%) patients did not receive BP. Clodronate was the most frequently used bisphosphonate in the study. 51.1% BP users received bisphosphonate therapy for less than 6 months. Additionally, the median starting time of bisphosphonate therapy from bone metastasis was 12.2 months. Compared with the ASCO guideline published in 2000,

the initiation of bisphosphonates therapy was relatively late and the duration of treatment was relatively short.

After the adjustment of differences in baseline characteristics, however, the odds ratio of pathologic fracture, vertebral fracture, nonvertebral fracture, bone surgery and compression were not different between BPs users and nonusers. Subgroup analysis for patients treated before any bone event occurred revealed the time to first vertebral fracture in 2 years was significantly delayed in the BP users (23.1 months, compared to 20.1 months in the non-users).

In conclusion, not many patients with breast cancer and bone metastasis were treated with bisphosphonate in this review, the initiation of bisphosphonate treatment was relatively late and the duration of therapy was relatively short. However, bisphosphonate therapy effectively delayed the first vertebral fracture for 3 months.