Journal Watch

Nabilone a Promising Adjunctive Medication for Advanced Cancer Patients

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Introduction:
The therapeutic use of cannabis has long history dating back thousands of years. In the past 10 years, there have been tremendous developments in the clinical application of cannabis and cannabinoids. A significant body of research evidence shows that cannabinoids have a broad spectrum of activity and maybe effective in manage multiple symptoms, such as pain, anorexia, anxiety and depression. Nabilone (Cesamet), a synthetic analogue of tetrahydrocannabinol ($\Delta^9$ THC), has been used in Canada for over 20 years, recently approved by FDA for treating refractory chemotherapy induced nausea and vomiting.

Abstracts:
This prospective observational study assessed the effectiveness of adjuvant nabilone therapy in managing pain and symptoms experienced by advanced cancer patients. Of the 468 referred patients, 132 patients lived >2 days and completed the 2 ESAS and 20 patients started nabilone at later date. The final study group involved 112 patients with cancer who survived for at least 48 hours after initial consultation and completes the ESAS questionnaire at baseline and at least once within 60 days of baseline. The patients were classified according to whether or not they were treated with nabilone and the treatment had to start on the day of referral and continue for at least 48 hours. The decision to prescribe nabilone was based on the presence of severe symptoms related stress on the initial consultation. Patients or primary givers provided the consent for nabilone’s off label use. Of the 47 treated patients, 21 were on nabilone for pain, 12 were for nausea, and 11 were for anorexia. The mean duration of follow up is 23.8 days (Nabilone) and 23.2 days respectively. Patients were started on 0.5 or 1 mg at bedtime for the first week to limit side effects then titrated by increments of 0.5 or 1 mg thereafter and the total daily dosage are divided in 2 doses. The mean daily dose of the 47 patients was 1.79mg.

Results showed there are differences between treated and untreated patients in Edmonton symptom assessment system (ESAS) pain scores and in total morphine sulfate equivalent (MSE) requirement after adjusting for baseline discrepancies with ANCOVA and propensity method (both <0.0001). In addition, more treated patient discontinued NSAIDS, TCAs or ondansetran and examethasone during follow up (P<0.0011), and less required initiation of gabapentin dexamethasone and metoclopramide (P<0.0070). The median survival rate is not different between the 2 groups (57days vs. 41days p=0.43).
Out of the 468 referred patients, 125 patients were prescribed nabilone, 8 (6.4%) discontinued nabilone within 24 hours due to side effects and the side effects abated within 24 hours.

**Strengths:**
1. Prospective study with deceased recall bias
2. ANCOVA and propensity score analysis to balance the 2 study groups.
3. Patients subjective symptoms assessment

**Weakness:**
1. Not a Randomized clinical trial.
2. Although adjusted with ANCOVA and propensity methods, the 2 groups may still have been unbalanced on unmeasured variables.
3. Not blinded to both researcher and patients.
4. Excluded patients who didn’t start nabilone at the very beginning
5. Possible bias due to the different timing of the second ESAS

**Relevance to Palliative care:**
Patients with advanced cancer rarely experience an isolated symptom so that polypharmacy is common. The side effects of the medications and potential drug interactions challenge clinicians in this population and affect patients’ QOL. Availability of effective adjunctive pain medications may have important implications for advanced cancer patient pain management; furthermore, single medication for multisymptoms may reduce the need for polypharmacy, decrease overall drug dose, and the outcome would include less suffering and improve QOL. Nabilone is a promising medication for the above reasons.