

# The Effects of Special Upper Cervical Adjustments on the CD4 Counts of HIV-Positive Patients

## ABSTRACT

*The researchers of this project sought to demonstrate that upper cervical specific adjustments would have a profound effect on the physiology, serology and immunology of HIV positive individuals.*

*The effect of specific upper cervical adjustments on the immune system CD4 cell counts of HIV positive individuals was measured by CD4/mm<sup>3</sup> in the blood. These tests were performed by the patients independent medical center where they were under medical supervision for the condition. The measured CD4 counts in the regular group were dramatically increased over the counts of the control group. A 48% increase in CD4 cells was demonstrated over the six month duration of the study for the adjusted group.*

**Key Indexing Terms:** Chiropractic, atlas, subluxation, CD4 count, immunology, dentate ligament, HIV.

## INTRODUCTION

The concept of the subluxation has been the cornerstone of the theory and practice of chiropractic since its founding in 1895 by D.D. Palmer. It is one of the most controversial concepts in health care today, and it finds its supporters and critics both within and outside the chiropractic profession.<sup>1</sup> Today it is estimated that 20 million patients receive chiropractic care annually at an estimated cost of 2 billion dollars.<sup>2</sup> As a profession, chiropractic has only begun to scratch the surface of the endless possibilities that stand before it in the realm of the subluxation and its effects on the nervous system.

Over the past 20 to 30 years several excellent attempts have been made within the profession to correlate the effects of adjustments on the likes of substance P, cortisol and lymphocytes.<sup>3</sup> Since 1984, the growing number of immuno-compromised people who have contracted HIV has left researchers worldwide scrambling for answers. It is estimated that this year the HIV population in the U.S. will reach 2.5 million.<sup>4</sup> This pilot study attempts to explain chiropractic's potential role in the care of these patients and the potential role of adjustments and their effect on the nervous system and the relationship between the nervous system and immunity.

## BACKGROUND

Since the beginning of the HIV epidemic, the infection has slowly become a chronic illness. Initially, patients were diagnosed with acute medical conditions requiring intensive medical therapy, and more chronic indolent problems were rarely addressed. Now with the improvement of early diagnosis and prophylactic therapies, patients are living longer. These circumstances have created an arena where wellness and quality of life issues are increasingly pertinent.

The search for and ultimately the detection of HIV, back in 1984 was promoted when researchers suspected that the consistent findings of opportunistic infections among hundreds of immuno-compromised patients could be related back to a single etiology. The virus itself is not detected in the blood of an infected patient, but rather the antigens to the virus are detected. The first standard test is the Elisa which can prove to result in false positive should the patient have a bad cold, flu or a hypersensitivity response as in allergies. The back-up test is the Western Blot test

which must pick up three different antigens in the blood, all present at the same time, to register a true positive. Only the presence of the HIV will render this outcome.

The efficacy of chiropractic care in the field of somato-visceral disease processes has been demonstrated by several practitioners over the past two decades.<sup>5-8</sup> Chiropractic, as it pertains to immunology, received a boost in 1991, when Patricia Brennan, Ph.D., et. al. conducted a study that ultimately demonstrated that when adjusting the thoracic spine the phagocytic respiratory burst of polymorphnuclear neutrophils (PMN) and monocytes from adjusted adults was enhanced.<sup>6</sup> There have been numerous medical studies demonstrating the direct nerve innervation to the immune system.<sup>9-17</sup>

## MATERIALS AND METHODS

### Experimental Design:

A randomized, controlled clinical trial utilizing the Grostic method of analysis and adjusting the upper cervical spine was used.<sup>18-19</sup>

Twenty-two patients were selected from the public to begin the study which took a duration of six months. The mean age was 28 years. Two patients expired during the study from complications of the disease. From the remaining 20 patients, five moved away or ceased care without notice. Five other patients did not submit significant blood work to warrant their inclusion in the final statistical analysis. The remaining ten (N=10) patients provided the significant data for our statistical workup. Three sets of blood work per patient for the ten patients was collected to assess the growth or decline of CD4 cells for each. Of the ten total patients, half were in the regular adjusted group (N=5) and half

were in the control group (N=5).

The regular adjustment was performed with the Laney KH-4 instrument with a transverse process contact on atlas. The vectors from the X-ray analysis were used with the patient on a Grostic adjusting table in the side posture position. For the control group, an inactive Laney KH-4 instrument was placed on the patients mastoid bone and the trigger was depressed with the patient in the supine position. No force was emitted from the stylus to the control patients. Post adjustment x-rays were taken to determine if the laterality and rotational components of the subluxation were reduced. Patients were asked to complete the Rand Corporation SF-36 quality of life questionnaire to establish a base line<sup>20</sup> and then weekly for the remainder of the study.

## PATIENTS HISTORY

Each patient was required to have a physical exam performed prior to the first adjustment. This exam included visceral, orthopedic, chiropractic, range of motion and historical findings. Eight of the ten patients were currently taking medication for the disease. Two of the ten were not under any medical care at all. Each of the patients on medication were taking AZT which is the drug of choice to

combat the rapid decline of CD4 cells by influencing the reverse transcriptase in the T-4 cells.

Patient findings for opportunistic infections included thrush, kaposi's sarcoma (KS), pneumocytis carinii pneumonia, back pain, neck pain and enlarged cervical lymph nodes.

## RESULTS

The control group experienced a 7.96% decrease and the adjusted group experienced a 48% increase in CD4 cell levels (P= 0.06). (Figs. 1-3) Both groups were monitored with the Rand Corp. SF-36 to determine quality of

life as rated subjectively. Both groups demonstrated subjective improvement with the control group exhibiting a slope of 1.62 and the adjusted group having a slope of 1.74. (Fig. 4.)

## CHIROPRACTIC CARE AND HIV / AIDS CONTROL PATIENTS (SHAM ADJUSTMENT)

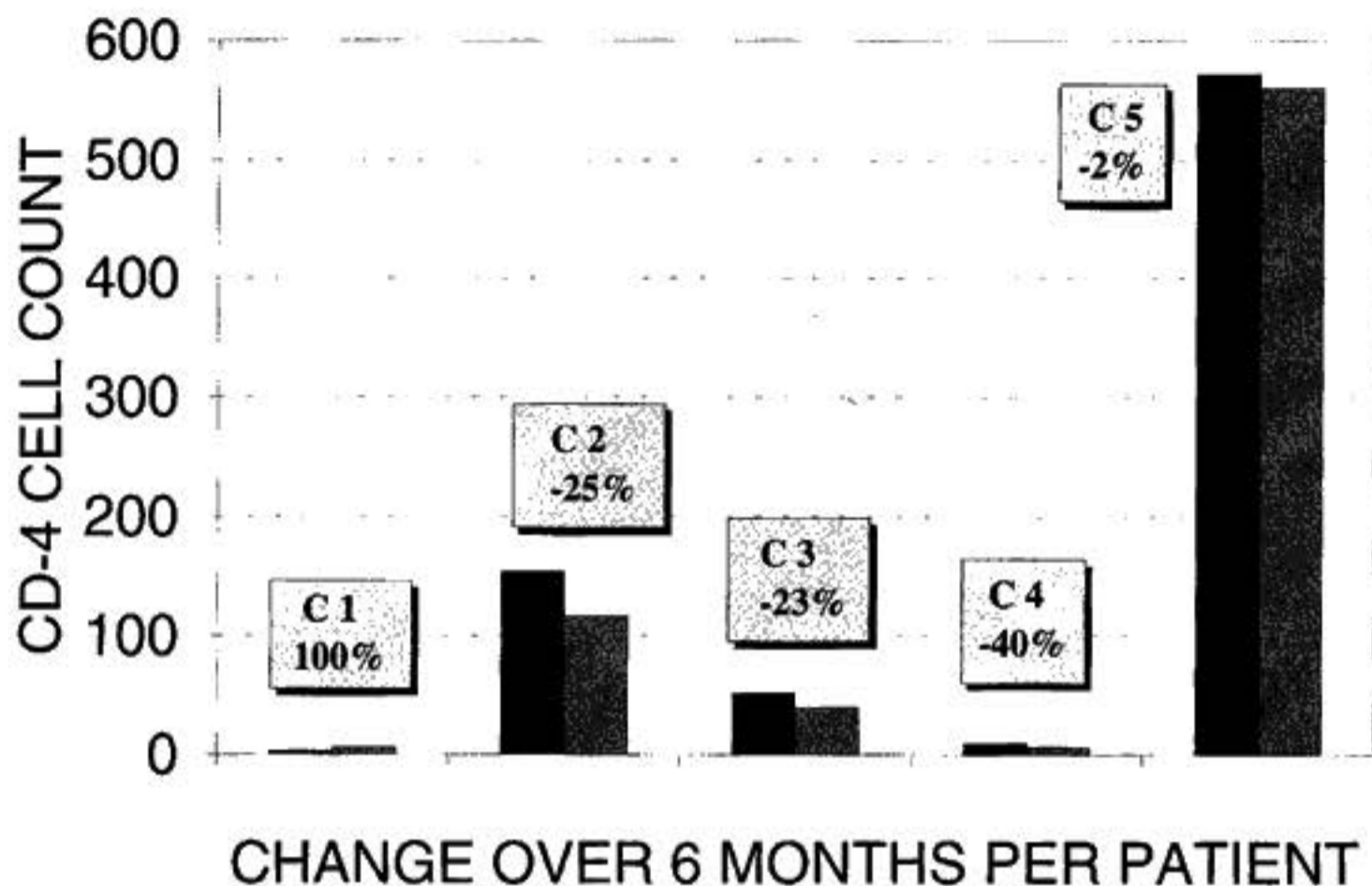


Figure 1

## CHIROPRACTIC CARE AND HIV / AIDS ADJUSTED PATIENTS

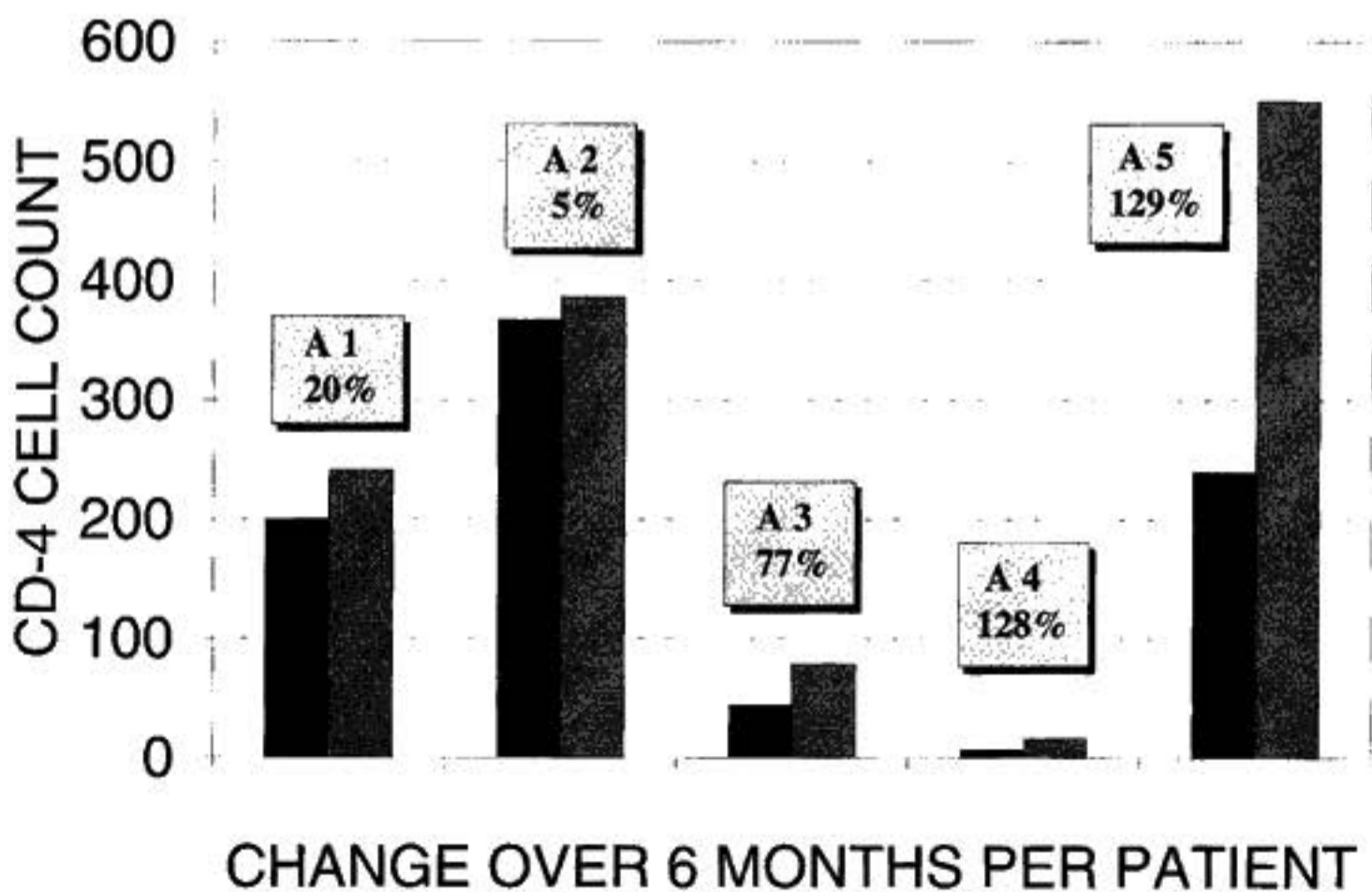


Figure 2