

PERBEDAAN KADAR VITAMIN D [25(OH)D₃] DAN INTERLEUKIN-6 ANTARA PASIEN KANKER SERVIKS DENGAN NON KANKER SERVIKS

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ABSTRAK

Latar belakang: Kanker serviks menjadi penyebab utama morbiditas dan mortalitas dari kanker pada wanita. Penderita kanker serviks diduga memiliki kadar vitamin D [25(OH)D₃] lebih rendah dibandingkan orang sehat. Interleukin-6 secara *in vitro* dihambat oleh vitamin D. Interleukin-6 dijelaskan sebagai faktor penting untuk patogenesis karsinoma serviks karena IL-6 adalah pusat mediator inflamasi pada infeksi genital wanita dan kanker serviks sering berkembang berhubungan erat dengan inflamasi kronis.

Tujuan: Membuktikan adanya perbedaan kadar vitamin D [25(OH)D₃] serta IL-6 pada pasien kanker serviks dan non kanker serviks.

Metode: Penelitian analitik observasional dengan pendekatan belah lintang pada 36 pasien kanker serviks dan 38 pasien non kanker serviks. Pengukuran kadar vitamin D [25(OH)D₃] dan IL-6 menggunakan *competitive enzyme linked immunosorbant assay* (ELISA). Uji komparatif menggunakan uji *independent t-test* dan *mann-whitney*.

Hasil: Rerata kadar vitamin D [25(OH)D₃] pada kelompok kanker serviks adalah 15,05±3,73 ng/mL, sedangkan kelompok non kanker serviks adalah 17,35±4,32 ng/mL dengan nilai $p= 0,017$. Kadar IL-6 pada kelompok kanker serviks mempunyai median sebesar 3,45(1,1-21,6) pg/mL dan pada kelompok non kanker serviks adalah 1,4(0,1-5,2) pg/mL dengan nilai $p= 0,0001$.

Simpulan: Kadar vitamin D [25(OH)D₃] lebih rendah dan IL-6 lebih tinggi pada pasien kanker serviks dibandingkan dengan pasien non kanker serviks.

Kata kunci: Kanker serviks, vitamin D [25(OH)D₃], interleukin-6

THE COMPARISON OF VITAMIN D [25(OH)D₃] AND INTERLEUKIN-6 LEVELS BETWEEN CERVICAL CANCER AND NON-CERVICAL CANCER PATIENTS

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ABSTRACT

Background: Cervical cancer is the leading cause of cancer morbidity and mortality in women. Patients with cervical cancer are thought to have lower vitamin D [25(OH)D₃] levels than healthy people. Interleukin-6 in vitro is inhibited by vitamin D. Interleukin-6 is described as an important factor for the pathogenesis of cervical carcinoma because IL-6 is a central mediator of inflammation in female genital infections and cervical cancer often develops in close association with chronic inflammation.

Objective: To investigate the differences in vitamin D [25(OH)D₃] and IL-6 levels in cervical cancer and non-cervical cancer patients.

Methods: Observational analytical study with a cross-sectional approach in 36 cervical cancer patients and 38 non-cervical cancer patients. Measurement of vitamin D [25(OH)D₃] and IL-6 levels using competitive enzyme linked immunosorbant assay (ELISA). Comparative test using independent t-test and mann-whitney test.

Results: The mean of vitamin D [25(OH)D₃] levels in the cervical cancer group was 15.05 ± 3.73 ng/mL, while the non-cervical cancer group was 17.35 ± 4.32 ng/mL with $p = 0.017$. IL-6 levels in the cervical cancer group had a median of $3.45(1.1-21.6)$ pg/mL and in the non-cervical cancer group was $1.4(0.1-5.2)$ pg/mL with $p = 0.0001$.

Conclusion: Vitamin D [25(OH)D₃] levels were lower and IL-6 higher in cervical cancer patients compared to non-cervical cancer patients.

Keywords: Cervical cancer, vitamin D [25(OH)D₃], interleukin-6