

PROFIL EKSPRESI K-RAS DAN KLINIKOPATOLOGIK KARSINOMA KOLOREKTAL DI WILAYAH BANYUMAS

ABSTRAK

Latar Belakang: Karsinoma kolorektal merupakan penyakit karsinoma terbanyak ketiga di seluruh dunia. Karsinogenesis kolorektal dapat terjadi melalui *Chromosomal Instability* (CIN) dan *Microsatellite Instability* (MSI). Salah satu mutasi proto-onkogen yang paling sering dijumpai adalah mutasi K-RAS.

Tujuan: Mengetahui profil ekspresi K-RAS dan klinikopatologik karsinoma kolorektal berupa usia, jenis kelamin, topografi, Stadium Dukes dan diferensiasi histopatologi di wilayah Banyumas.

Metode: Metode penelitian ini adalah deskriptif observasional dengan pendekatan *cross sectional*. Total sampel 57 blok parafin untuk diteliti profil klinikopatologik dan 45 blok parafin dilakukan pemeriksaan imunohistokimia untuk diteliti profil ekspresi K-RAS dinilai menggunakan skor Allred. Sampel diambil dari RSMS dan RSUD Banyumas tahun 2014. Analisis statistik menggunakan statistik deskriptif.

Hasil: Profil ekspresi K-RAS ditemukan 33,33% positif dan 66,67% negatif. Profil klinikopatologik usia 19,29% ≤ 40 tahun 80,70% > 40 tahun; jenis kelamin 56,14% laki-laki dan 43,85% perempuan; topografi 40,35% kolon proksimal dan 59,64% kolon distal; Stadium Dukes A 0%, Dukes B 70,17%, Dukes C 17,54% dan Dukes D 12,28%; diferensiasi histopatologi 84,21% baik, 14,03% moderat dan 1,75% buruk.

Kesimpulan: Profil ekspresi K-RAS 33,33% positif dan klinikopatologik terbanyak yaitu usia > 40 tahun, jenis kelamin laki-laki, topografi pada kolon distal, Stadium Dukes B dan diferensiasi histopatologi baik pada penderita karsinoma kolorektal di Wilayah Banyumas.

Kata Kunci: ekspresi K-RAS, profil klinikopatologik, karsinoma kolorektal

K-RAS EXPRESSION AND CLINICOPATHOLOGICAL PROFILE OF COLORECTAL CARCINOMA IN BANYUMAS REGION

ABSTRACT

Background: Colorectal carcinoma is the third most common carcinoma in the world. Colorectal carcinogenesis may occur by Chromosomal Instability (CIN) and Microsatellite Instability (MSI). One of the most frequent proto-oncogene mutations encountered is K-RAS mutations.

Objective: The study aimed to determine the expression of K-RAS and clinicopathological profile such as age, sex, topography, Dukes Stage and histopathological differentiation in Banyumas region.

Methods: This is a descriptive observational study with cross sectional approach. Total sample was 57 paraffin blocks for clinicopathological examination and 45 paraffin blocks for immunohistochemistry examination. This was used to observe K-RAS expression profile and was assessed using Allred score. Samples were taken from RSMS and Banyumas Hospital from 2014. Descriptive statistics was used for statistical analysis.

Results: K-RAS expression was found 33,33% positive and 66,67% negative. Clinicopathological profile by age were 19,29% ≤ 40 years and 80,70% > 40 years; by gender were 56,14% male and 43,85% female; based on topography were 40,35% from proximal colon and 59,64% from distal colon; based on Stadium Dukes were 0% Dukes A, 70,17% Dukes B, 17,54% Dukes C and 12,28% Dukes D; based on histopathological differentiation were 84,21% well-differentiated, 14,03% moderately differentiated and 1,75% poorly differentiated.

Conclusion: The K-RAS expression profiles was 33.33% positive and most clinicopathological profiles were age > 40 years, male gender, the topography of the distal colon, Stadium Dukes B and well histopathological differentiation of colorectal carcinoma in Banyumas region.

Keywords: K-RAS expression, clinicopathological profile, colorectal carcinoma