

ANANASOV SOK IN MAGNETNORESONANČNA HOLANGIOPANKREATOGRAFIJA. UČINKOVITOST KOT NEGATIVNO ORALNO KONTRASTNO SREDSTVO – PRIMERJALNA ŠTUDIJA

PINEAPPLE JUICE AND MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY.
EFFICACY AS A NEGATIVE ORAL CONTRAST AGENT – COMPARATIVE STUDY

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IZVLEČEK

Uvod in namen: Magnetnoresonančna holangiopankreatografija (MRCP) je neinvazivna tehnika, ki omogoča dostop do pankreatobilijarnega sistema. Med MRCP so lahko pankreatobilijarni vodi zakriti zaradi intenzivnega signala iz želodca in dvanajstnika. Ananasov sok (AS) je lahko alternativa komercialno dostopnim negativnim kontrastnim sredstvom, vendar lokalno še ni bil ocenjen.

Metode: Radiološki oddelek Univerzitetnega kliničnega centra Republike Srpske je izvedel opazovalno, primerjalno analitično študijo. Raziskava je bila opravljena z 10 bolniki, pri katerih so bile opravljene preiskave MRCP, in 10 zdravimi prostovoljci. Zaporedje MRCP z 1,5 Tesla je bilo izvedeno neposredno pred zaužitjem 400 ml lokalnega, komercialno dostopnega pripravka AS ter 15 in 30 minut po zaužitju. Slike sta slepo ocenila dva radiologa svetovalca s standardno tehniko razvrščanja, ki je temeljila na učinku kontrasta (stopnja supresije signala črevesja) in učinku slike (diagnostična kakovost). Primerjal sem pridobljene rezultate z rezultati iz drugih študij.

Rezultati: Zlasti občutno se je izboljšala vizualizacija pankreatičnega voda, ampule in žolčnih vodov. Vendar med slikami, pridobljenimi 15 minut in 30 minut po zaužitju, ni bilo bistvene razlike, medtem ko je primerjalni članek pokazal, da v trgovini kupljena, priročno pakirana in enostavno zaužljiva količina ananasovega soka izboljša kakovost slikanja MRCP.

Razprava in zaključek: Pripravek AS, uporabljen v tej študiji, je učinkovito, cenovno dostopno in naravno negativno oralno kontrastno sredstvo, ki zagotavlja učinkovito supresijo signala v gastrointestinalnem traktu pri MRCP.

Ključne besede: MRCP, ananasov sok, negativno oralno kontrastno sredstvo, pankreatobilijarni vodi

ABSTRACT

Introduction: Magnetic resonance cholangiopancreatography (MRCP) is a non-invasive technique that allows access to the pancreato-biliary system. During MRCP, the pancreaticobiliary ducts can be obscured by the high-intensity signal from the stomach and duodenum. Pineapple juice (PJ) may be an alternative to commercially available negative contrast agents but has not been evaluated locally.

Methods: An observational, comparative analytical study was conducted by the radiology department of the University Clinical Centre of Republika Srpska. The research was done with 10 patients subjected to MRCP exams and 10 healthy volunteers.

A 1.5 Tesla MRCP sequence was performed immediately before and 15 and 30 minutes following the ingestion of 400 mL of a local, commercially-available PJ preparation. Images were assessed blindly by two consultant radiologists using a standard grading technique based on contrast effect (degree of suppression of bowel signal), and image effect (diagnostic quality).

I compared the obtained results with the results from other studies.

Results: There was a particularly significant improvement in the visualization of the pancreatic duct, ampulla, and bile ducts. However, there was no significant difference between images acquired 15 minutes and 30 minutes after consumption, while a comparative article demonstrated that a store-bought, conveniently packaged and easily consumable quantity of pineapple juice improves the quality of MRCP imaging.

Conclusion: The PJ preparation used in this study is an effective, affordable and natural negative oral contrast agent which provides effective signal suppression in the GI tract on MRCP.

Keywords: MRCP, pineapple juice, negative oral contrast, pancreaticobiliary ducts,

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