

# 大腸鏡影像之息肉偵測

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## 摘要

本論文針對大腸鏡影像作息肉之自動辨識及偵測，判斷內視鏡所拍攝之影像是否有息肉(Polyp)存在，藉以提醒臨床醫師作更詳細的檢查。首先將彩色影像轉換為灰階後利用Canny Filter作邊界及輪廓偵測，然後再利用CSS(Curvature Scale Space)作曲線平滑並偵測轉折點，最後計算平均曲率(Curvature)以判別影像中是否可能有息肉存在。本論文的主要目的為利用電腦輔助的方式來協助醫師作內視鏡檢察時能即時提醒醫師影像是否有息肉存在，減少在人為的疏失，提高早期發現早期治療的目標。實驗結果顯示，本論文所提出之方法可以偵測大部份之息肉，未來將繼續血管叢阻斷及癌症所導致之血管增生之偵測。

關鍵詞：息肉(Polyp)，大腸鏡，內視鏡，影像分析

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