

언어구분 ENG                      논문구분 원저/구연                      논문분야 정형외과일반  
일차성 인간 대식세포의 표현형의 분화는 코발트 합금 입자에 대하여는  
논문제목 **M1** 반응을 보이고 코발트 합금 입자와 내독소에 대하여는 **M2** 반응을  
보인다.  
**Phenotypic Differentiation of Primary Human Macrophages**  
영문제목 **indicates M1 Response to Cobalt-alloy Particles and M2**  
**response to Particles with Endotoxin**  
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증례 (**or** 수술술기) : Recently, it was reported that macrophages can exist in different activation states: either pro-inflammatory classically activated state (M1), or anti-inflammatory alternatively activated state (M2). However, human macrophage phenotypic expressions in response to orthopedic implants are unknown. We investigated macrophage polarization in response to Cobalt-alloy particles with and without the presence of lipopolysaccharide (LPS) by measuring the cytokine production profiles and flow cytometry.

**acknowledgment :**

Primary Human Macrophages, M1/M2 Response, Cobalt-alloy Particles, Endotoxin

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