



**AUTOLOGOUS CHONDROCYTE IMPLANT/MENISCAL
ALLOGRAFT/OSTEOCHONDRAL REPLACEMENT**

Effective Date: August 15, 2009

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Date Of Origin: August 22, 2001

Status: Current

I. DESCRIPTION

Autologous Chondrocyte Implantation (ACI) and Meniscal Allografts of the knee are a covered benefit when prior authorized by Priority Health and all criteria listed below are met.

II. POLICY/CRITERIA

Osteochondral replacement coverage is defined below.

A. Autologous Chondrocyte Implant for the knee

1. *All* of the following must apply:
 - a. Age 15 – 55 years
 - b. BMI < 35.
 - c. Presence of disabling pain and/or knee locking lasting more than 1 year
 - d. Focal articular cartilage defect down to but not through the subchondral bone load bearing surface of the medial and/or lateral femoral condyle (not in the patellofemoral area)
 - e. Size of defect measures <7mm in depth, <6.0 cm in length, and area ranging 1.6 – 10 cm²
 - f. Stable knee with intact meniscus and normal joint space on X-ray. Knee must be stable and aligned (corrective procedures may be performed in combination with or prior to autologous chondrocyte transplantation)
 - g. No active inflammatory or other arthritis, clinically and by X-ray
 - h. Procedure is not being done for treatment of degenerative arthritis
 - i. Failure of conservative therapy (minimum of 2 months of physical therapy) and other traditional surgical interventions (i.e., microfracture, drilling, abrasion)
 - j. Cooperative patient for postoperative weight bearing restrictions and activity restrictions together with a potential for completion of postoperative rehabilitation Patient must be motivated and willing to comply with rigorous rehabilitation program.
2. Autologous chondrocyte implantation is not covered for patients with the following:



- a. History of total meniscectomy,
 - b. Significant joint malalignment
 - c. Infection at any of the operative sites
 - d. Osteoarthritis
 - e. Inflammatory disease
 - f. Known history of an allergy to materials of bovine origin or gentamicin
 - g. Cancer in the bones, cartilage, fat or muscle of the affected limb
3. Autologous Chondrocyte Implants for joints other than the knee are considered experimental and investigational and are not a covered benefit.
- B. Meniscal Allograft for the knee
1. *All* of the following must apply:
 - a. Age 15 - 50 years of age
 - b. Documented absence of a meniscus established by MRI, diagnostic arthroscopy or previous operative reports
 - c. Documentation of at most mild to moderate articular degeneration (Outerbridge grade 1-2*)
 - d. Ligamentous stability prior to surgery or achieved concurrently with meniscal transplantation
 - e. Disabling knee pain refractory to conservative treatment
 2. Meniscal allograft transplantation is contraindicated if any of the following are present:
 - a. Significant articular degeneration (Outerbridge 3 or 4*)
 - b. Bony architectural changes (including osteophytes)
 - c. Current infection of the affected knee
 3. Meniscal allografts for joints other than the knee are considered experimental and investigational and not a covered benefit.
- C. Osteochondral Replacement
1. Osteochondral Autografts, including Osteochondral Autograft Transfer System (OATS®) and mosaicplasty:
 - a. Osteochondral autografts are covered for repair of small (less than or equal to 1 cm²) focal chondral defects of articulating cartilage of the ankle or knee that cause significant symptoms that have not been relieved by appropriate non-surgical therapies.
 - b. Osteochondral autograft transplantation to repair chondral defects of the elbow, shoulder, hip, or other joints is considered experimental and investigational.
 - c. The hybrid autologous chondrocyte implantation/OATS technique is considered experimental and not a covered benefit.
 2. Osteochondral Allografts:
 - a. Osteochondral Allografts of the knee may be covered for *any* of the following:



- Treatment of an isolated, traumatic injury that is full-thickness depth (grade 4, down to and/or including the bone) lesion, preferably surrounded by normal, healthy (non-arthritic) cartilage. The opposing articular surface should be generally free of disease or injury; or
 - Non-reparable stage 3 or 4 osteochondritis dissecans; or
 - Avascular necrosis lesions of the femoral condyle; or
 - Otherwise healthy, active, non-elderly members who have either failed earlier arthroscopic procedures or are not candidates for such procedures because of the size, shape, or location of the lesion.
- b. Osteochondral allografts for all other joints, including the ankle, are considered experimental and not a covered benefit.

*Cartilage damage in the knee may be described by the Outerbridge classification system:

- Grade 0 Normal cartilage
- Grade I Cartilage with softening and swelling
- Grade II Partial-thickness defect with fissures on the surface that do not reach subchondral bone or exceed
- Grade III Fissuring to the level of subchondral bone in an area with a diameter of more than 1.5 cm
- Grade IV Exposed subchondral bone

III. MEDICAL NECESSITY REVIEW

- Required Not Required Not Applicable

IV. APPLICATION TO PRODUCTS

Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

- ❖ **HMO/EPO:** *This policy applies to insured HMO/EPO plans.*
- ❖ **POS:** *This policy applies to insured POS plans.*
- ❖ **PPO:** *This policy applies to insured PPO plans.*
- ❖ **ASO:** *For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.*
- ❖ **INDIVIDUAL:** *For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.*
- ❖ **MEDICARE:** *Coverage is determined by the Centers for Medicare and Medicaid Services (CMS).*



- ❖ **MEDICAID:** Coverage is determined by the Michigan Medicaid Provider Manual and the Michigan Medicaid Fee Schedule at: http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html.
- ❖ **MICHILD:** For MICHILD members, this policy will apply unless MICHILD certificate of coverage limits or extends coverage.

V. CODING INFORMATION

ICD-9 Codes that may support medical necessity

- 717.9 Unspecified internal derangement of knee
- 719.46 Pain in joint lower leg
- 732.7 Osteochondritis dissecans
- 732.9 Unspecified osteochondropathy
- 733.43 Aseptic necrosis of medial femoral condyle
- 733.90 Disorder of bone and cartilage, unspecified
- 738.8 Acquired deformity of other specified site
- 959.7 Injury, knee, leg, ankle, foot

CPT/HCPCS Codes

Autologous Chondrocyte Implantation

- 27412 Autologous chondrocyte implantation, knee
 - J7330 Autologous cultured chondrocytes, implant
 - S2112* Arthroscopy, knee, surgical for harvesting of cartilage (chondrocyte cells)
- *S code not payable for Medicaid or PriorityMedicare*

Osteochondral Replacement

- 27416 Osteochondral autograft(s), knee, open (eg, mosaicplasty) (includes harvesting of autograft[s])
- 29866 Arthroscopy, knee, surgical; osteochondral autograft(s) (e.g., mosaicplasty) (includes harvesting of the autograft)
- 28446 Open osteochondral autograft, talus (includes obtaining graft[s])
- 27415 Osteochondral allograft, knee, open
- 29867 Arthroscopy, knee, surgical; osteochondral allograft (e.g., mosaicplasty)

Meniscal Allografts

- 29868 Arthroscopy, knee, surgical; meniscal transplantation (includes arthrotomy for meniscal insertion), medial or lateral

VI. REFERENCES:

“Allograft Transplants of the Lower Extremity”, Aetna Clinical Policy Bulletin, Number 0364, 06/27/06. Available on the World Wide Web at <http://www.aetna.com/cpb/data/CPBA0364.html> (Retrieved April 6, 2007 & May 18, 2009).

”Autologous Chondrocyte Transplant”, Aetna Clinical Policy bulletin, Number: 0247, 11/21/06. Available on the World Wide Web at <http://www.aetna.com/cpb/data/CPBA0247.html> (April 6, 2007 & May 18, 2009).



“Osteochondral Autografts”, Aetna Clinical Policy Bulletin, 0637, 12/01/06.
Available on the World Wide Web @
http://www.aetna.com/cpb/medical/data/600_699/0637.html (Retrieved April 6,
2007 & May 18, 2009)

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