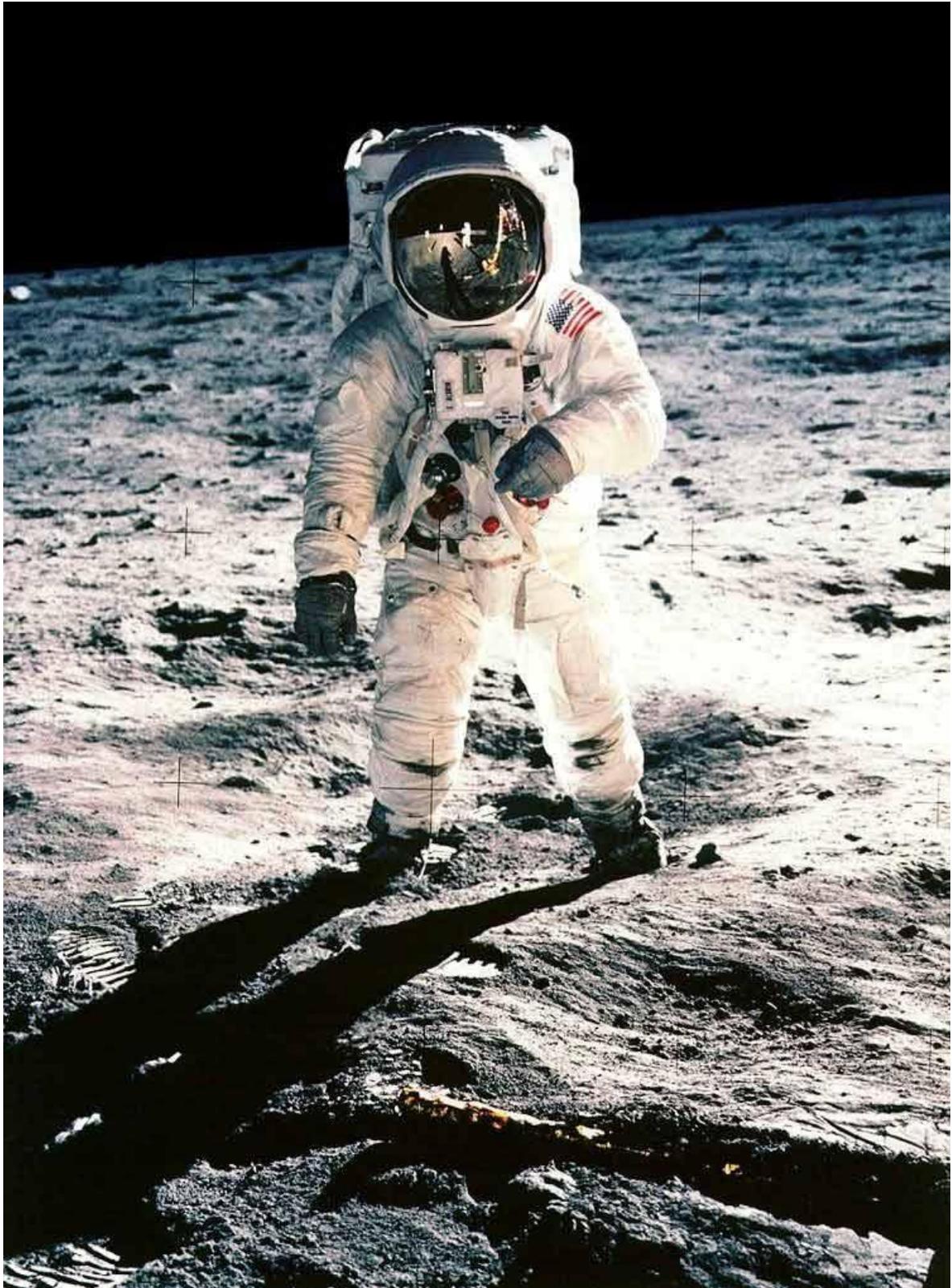


CAM WALKERS FOR EMERGENCY PATIENTS



The most famous image of the Twentieth century. Edwin "Buzz" Aldrin; second human to set foot on the Moon. Neil Armstrong, the first man to set foot on another world is seen reflected in his visor, NASA, July 1969.

1618 Hours: Communication from the Lunar Module to Houston Mission control:

Neil Armstrong: “Houston, Tranquillity base here...

...The Eagle has landed”

Mission Control: “Roger, Tranquillity...We copy you on the ground. You got a bunch of guys about to turn blue. We’re breathing again...

2256 Hours: Communication from the surface of Moon to the entire World:

Neil Armstrong: “That’s one small step for a man, one giant leap for mankind”.

This is perhaps the greatest communication in humanity’s history, the moment the Lunar Module landed on the Moon, followed some hours later by another short communication from Neil Armstrong that he had set foot on the Moon. From this epic moment then came possibly the greatest visual image of the Twentieth century - indeed probably ever taken - that of Edwin Aldrin standing on the surface of the Moon. Stimulating dinner party conversations often like to explore, the best ever this, the greatest ever that and the like. Heated controversy usually follows, particularly to the question of the individual who would be remembered most from a vast span of time - many, many many, have fame for the proverbial 15 minutes, a host have fame for a century even several centuries, but who would you name if it were for the Millennium? If you had to name just one individual. For the first Millennium (C.E), one would perhaps have to consider, Jesus Christ or the prophet Mohammed. An intriguing question follows of which individual would be remembered the most one thousand years from the present day. When this issue is discussed at a third Millennium dinner party - when it came to the second Millennium the name could well be Neil Armstrong, the first human to step onto another world. Neil Armstrong shunned the public eye for the rest of his long life following the Moon landing of 1969. But this only made his enigmatic charisma all the more fascinating - he symbolised humanity’s greatest ever scientific achievement. If the first millennium was symbolized by Jesus Christ and the Prophet in a deeply religious age, then Neil Armstrong could come to symbolize, a thousand years from now, humanity’s great age of science, the Moon landing being the crowning culmination of the Renaissance and the Enlightenment of the second Millennium.

It is difficult now for younger generations to appreciate just how momentous an event the Moon landing was. Young people think that the Olympics are the greatest events held - but the Moon landing was for a brief moment bigger than a hundred Olympics combined. The entire world, Christian, Muslim, Hindu, Atheist, Capitalist, Communist - stood still and held its breath as one - as Armstrong’s immortal words were relayed from the surface of the Moon and in an instant flashed across the entire globe. Everyone on the planet stopped what they were doing and listened as one and in silence to the words of a single man, who gave a wonderful and powerful message of hope to a world at the time that was locked in titanic struggle between two great philosophies, capitalism and communism. Science had evolved to the point, in the form of nuclear weapons, that made direct conflict unthinkable between the grand advocates of these two philosophies, and so the struggle for world supremacy was fought by proxy - in 1969 this was in Vietnam. What the Moon landing did was, for a brief moment, bring the whole of humanity together as one, in a sense of pride in our own species; no matter what our differences. Young children at the time - myself

included - watched wide eyed and opened mouthed - firmly believing that we would be colonizing Alpha Centauri before the decade was out!

Neil Armstrong, having accomplished his mission, withdrew from the public eye for the rest of his life. Edwin Aldrin was profoundly spiritually affected by the mission and became the public face of NASA in the promotion of the exploration of Space for peaceful purposes. But it was the forgotten third man of the mission, Michael Collins who told perhaps three of the most poignant stories to come from the great adventure. He told these in the stunning commemorative film, "In the Shadow of the Moon", produced by Ron Howard, a film in part about how the event affected the lives of the Astronauts as well as the lives of everyone on the Earth. The first story relates to his time on the dark side of the Moon. Collins did not walk on the Moon, he had to stay orbiting it- alone - in the Command Module, while Armstrong and Aldrin went to the surface in the Lunar Module. Once on the far side of the Moon there was no communication possible with the Earth. For hours he was completely cut off from all humanity. He looked out at the blackness, not knowing how the mission was proceeding or even if his colleagues were still alive. He felt he was the loneliest man in history, and looking into the black void realised the vast scale of the universe we inhabit. The second story related to the joy he felt when he again emerged into the warm light of the Sun and beheld the beautiful vision of mother Earth rising above the bleak lifeless rocks of the Moon. If the dark side of the Moon showed him how alone in the Universe we are, then the vision of the Earth itself showed him its extreme fragility. He held up his thumb for idle amusement, and found that it completely covered the Earth - but in doing this he realized then just how precarious our place in the vast black lifeless void is. On the cosmic scale, the Earth is but the barest speck of insignificant dust. He longed to be home. Why are people killing each other all over the globe, and destroying the planet he thought - don't they realise just how precarious it all is, what a miracle life is? The third story, most poignant of all, takes place back on Earth. Feted around the world, the Astronauts met many world leaders and dignitaries, but one meeting stood out for Collins. He was shaking the hand of an African leader, who exclaimed with tears in his eyes, "We did it! - we did it!" Collins realized that this was not an "American" achievement, to be lauded over their Russian rivals - but the African leader meant it in the sense of the achievement of humanity as a species, and this at the height of the Cold War. Collins never regarded the Moon landing as a uniquely American achievement, but rather, as the African leader exclaimed, an achievement for all humanity, united as one.

The essence of the greatest enterprise of humanity was perhaps best summed up by an obscure one hit wonder, by and obscure singer, John Stewart in 1970:

"...Rivers getting dirty, the wind is getting bad.

War and hate are killing off the only Earth we have.

But the whole world stopped to watch it on that July afternoon.

Watched a man named Armstrong walk upon the moon.

And I wonder if a long time ago somewhere in the universe, they watched a man named Adam walk upon the Earth."

The Moon missions of the late 1960s and early 1970s have become part of the collective cultural psyche of humanity; ingrained even in our everyday language in many subliminal ways - the “Moon Boot” expression being one such quirky example!

CAM WALKERS FOR EMERGENCY PATIENTS

Introduction



The “Controlled Ankle Motion” (CAM) Boot Walker

In cases where a patient requires below knee immobilisation, there are several options.

If there is displacement, angulation or concern then discussion with the Emergency Physician +/- Orthopaedic Registrar is paramount.

For splinting of injuries that are to be managed conservatively and discharged there are several options, including:

- Below knee plaster and non-weight bearing with crutches.
- Plaster Back slab and non-weight bearing on crutches.
- Dynacast Back slab and non/partial weight bearing on crutches.
- **“Controlled Ankle Motion” (CAM) Boot Walker and non/partially weight bearing on crutches.**

The **CAM boot**, (also known as an “actimove walker” or “equalizer walker” depending on the manufacturer) is a walking boot that limits the movement of the ankle and /or foot.

Made from a combination of rigid moulded plastic, a non-slip rubber rocker sole, a breathable padded lining and Velcro straps it can be sized and fitted to most patients to immobilise ankle and foot injuries.

The specially engineered low and wide rocker bottom promotes a natural gait and increased stability.

Indications

General indications for a CAM walker include:

- Stress Fractures of the lower leg
- Stable Fractures around the Foot and Ankle
- Stable Delayed Union or Non-Union fractures of the Distal Tibia and Fibula
- Some soft tissue injuries of the lower leg.
- Post-Operative Use
- During Trauma Rehabilitation programs.

In the setting of the ED, the most common indications include

- **Stable fractures of the base of 5th metatarsal**
- **Un-displaced metatarsal shaft fractures (including Jones fracture)**
- **Minor avulsion type fractures with severe symptoms**
- **Stable Weber A fractures of the distal fibula.**
 - ♥ **Weber B or C type fractures are NOT suitable and require full plasters.**
- **Severe ankle (Grade III) strains or sprains**
 - ♥ In general CAM walkers should *not be used for more minor soft tissue injuries* (i.e. Grade 1 and Grade II ankle sprains) as this may encourage unnecessary immobilisation and be detrimental to injury recovery.

Advantages

Advantages of the CAM walker over other methods of immobilization include:

- Lightweight
- Waterproof
- Non-slip

- Shaped to minimise ascending problems due to abnormal gait
- Able to be removed for showering
- Can be cleaned
- Reusable (fits right or left limb also) for the one patient
- Designed for weight bearing (but can be initially non weight bearing)
- Facilitates safe partial weight bearing in older patients who would not otherwise be able to safely manage a cast and gait aid (crutches/frame).

Disadvantages

- Patients may be encouraged to weight bear prematurely
- In most public hospitals these devices are not provided free of charge and so the patient will be required to cover the cost of the device.

Fitting the CAM Walker

- CAM boots come in various sizes and **must be correctly fitted.**
- In the ED setting the **Physiotherapist, orthotists** or **nursing staff** may do this.

Patient Instruction

- **Clear instructions** must be given if the patient is not to weight bear in the initial stages of the recovery process.
- **Patient education sheets** must be provided.

Discharge Planning

- Patients must be assessed as **safe for discharge** - consider liaison with **care co-ordinators, physiotherapist or occupational therapist, as appropriate.**
- **Consider need for a Short Stay Admission if required.**
- Ensure referral and follow up appointments made.
- An accompanying letter to the LMO outlining the management plan (eg non-weight bearing for 2 weeks, then Partial for 2 weeks).
- Referral to Specialist Fracture Clinic as required.

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