The Videoinsight® Method: Application in Medical Orthopaedic Rehabilitation

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Videoinsight® means to have an insight by looking at a work of contemporary art. It indicates the aim and the psychological effect that are potentially provoked by the interaction with some selected contemporary works of art. The insight promoted by the work of art is the outcome of the activation of transference, of projections and reflections on the artistic product, of the unconscious elaboration that leads to the development of transformation. Videoinsight® is a theoretical concept, a working method, a psychological process. It is based on the experience of exchange and integration between the contemporary artwork and the psychology of the people who relate to it. Some works of contemporary art provoke and stimulate the psyche and activate psychological mechanisms. They trigger an intellectual and emotional experience: They make us think and make us feel. Interacting with selected works of art means growing and activating the development of human potential. The Videoinsight® method can be applied in prevention, diagnosis, psychological support, and psychotherapy for treatment of all psychological and psychosomatic diseases. It has been already applied in medical orthopaedic researches for rehabilitation and psychological support.

Keywords: Videoinsight®, contemporary art, prevention, psychological support, psychological diagnosis, psychotherapy, rehabilitation, artworks, images, medical researches, well-being, Anterior Cruciate Ligament Reconstruction

Introduction

From the moment they are born, children use their eyes to experience images, which are initially confused, but later they become clearer. Looking is the first way of discovering and learning about the world; constructing images is the simplest and most immediate way to represent reality within oneself. We think in images and translate the images into language. The mind is capable of producing mental images. We leave in a world of images determined by the media. We are capable to produce mental images. The unconscious in the dream activity is expressed by images. We deal with the images continuously. The images are powerful: They can feel sensations and emotions in a privileged condition of spontaneous infantile regression. Some artworks, with their ambivalences, ambiguities, symbolism, and mysteries, perturb the unconscious, overcoming the barriers of defences and the resistances, break the rigid schemes, modify the distances, overturn the meanings, interrogate the multiplicity, and stimulate the emergence of new resources. They provoke perceptions, psychosomatic effects, emotions, affections, and feelings. They activate imaginations and fantasies, creativity.
through projections, and reflections. They promote knowledge: interpretations, processes, thoughts, reflections, learning, attitudinal orientations, and communications. They cause actions, decisions, socializations, and changes. They penetrate into the unconscious with greater strength and speed than words: driving and transmitting energy, revitalizing, affecting the personality in her operation and in her structure. They carry the identity to be no longer identical, placing her in suspension between many possibilities, pushing her towards the frontiers of creative change and towards new horizons of well-being. The images can touch deeply, and have a great impact on the personality because it can: (1) stimulate the cognitive reflection, the exchange, and the creativity; (2) develop fantasy, reflection, and psychosomatic dimension; (3) activate the communication, the action, and the decision; and (4) promote the attitudinal orientation and the socialization.

Videoinsight® means the awareness activated by the artworks view. It is the result of transfer activation that means projection and reflection on the artist product and unconscious elaboration leading to the evolutionary transformation. To interact with an artwork means: to receive, to give, to transform, and to change. Some contemporary artworks are universal, transversal, immortal, eternal, always actual, and circular. They treat primary issues of the life that come back in every time and place. They are relational, since they can connect, create relationships, transform us as “Giani Bifronti”, and stimulate the view outside the external reality and inside ourselves (in interior world). They are symbolic and clue, since they can indicate and evoke something else. Contemporary artwork is potentiality. It conveys meanings, requests a sense attribution, and includes a message that must be kept, that is provocative, uncanny. It touches unconsciously and stimulates an experience simple, complex, total, dynamic, intellectual, aware, affectedness. Art is a mirror of unconscious himself. It is mysterious, does not close, solve, or explain. It urges questions, stimulates doubts, opens doors, breaks the habitue. Art can move the psychic process. It stimulates the creativity and reduces the resistances. Contemporary art can be diagnostic and therapeutic. Art can heal: It promotes the changes and solves the individual and relational psychological unease. Because it stimulates thoughts, memories, sensations, emotions, desires, fantasies, secrets, and narrations. It breaks the rigid scheme, puts in crisis the common thoughts, converts the meaning attributions, asks for multiple meanings; promotes the changes, stimulates the emergence of new resources, puts in suspension between many possibilities, puts away, lets travel, and opens new horizons. It pushes forward the frontier of unknown. It is anticipatory, prophetic. It reveals the future. It activates the “insight”: the interior vision, the awareness, the intuition, the illumination, and the problem solution with a sudden idea, immediate, that allows to visualize the problem in its globality, reaching in few instant, the searched solution. Art is a wonderful adventure. It is a mirror, that reflects, like a “Rorschach table”, the most intimate part of the observer (Schafer, 1954).

To talk about the artwork means to reveal ourselves. Some images of the contemporary art promote deep changes: They touch and move the most hidden, rigid, obscure parts of a personality. Art speaks about the basic and universal human needs. It is a real chance for everybody: an opportunity for development, progress, identification, and psychological emancipation. It stimulates an experience of freedom and intellectual lightness. It is emotional, affective, perceptual, and mnemonic. It obliges to think, to feel, to change. It transforms. It opens the doors of the future.

For this reason, as a consequence of the insight that stimulates in the viewers, some artworks can heal, help, promote well-being, support in each person the healthy part, and cure the weak, complicated, suffering part.

In 2011 Rebecca Luciana Russo introduced some selective contemporary artworks in the processes of psycho-diagnosis and psychotherapy, according to the Videoinsight® concept and to the Videoinsight® method.
developed by her. She has tested these selected artworks for many years in the clinical setting with many patients, reaching very important and significant results. Videoinsight® means to have an “insight”: a simple and essential intuition, an illumination, a discovery, an awareness, a review deep and integrated, that involves mind and emotions at conscious and unconscious level. Videoinsight® can cause the evolution of personality, the solution of a psychological problem, the release from a stall and the promotion of the psycho-physic well-being (Russo, 2011).

The Videoinsight® method is applicable in favour of everybody because it proposes an experience instinctive, natural and simple, that is independent of age, gender, socio-cultural membership, religious beliefs, and linguistic competence. The Videoinsight® method integrates culture and health in an innovative, holistic, and interdisciplinary way. It has been proven effective by the medical science, with the utmost rigor of objectivity, according to the current international standards. It is a scientific method, realistic, and applicable in practice. It is focused on the person and it represents a privileged way for the cultural welfare, as it is an approach to the social and individual health and wellness, that relates the quality of the psychological experience with the system of care and prevention. It improves the people’s lives, increases the social welfare, reduces the time and the costs of the cares, fights the chronicities, prolongs the existential expectations, and reduces the stress: Accordingly, it can bring benefits and savings under the economic and social profile as well (Russo, 2012).

The artworks are selected with competence, responsibility and professional ethics by the psychotherapist, on the basis of the psychological needs of the viewers. Sometimes they contain sounds, but never words, immediately engage the mind and the heart, break the defences of the intellectual judgment and bias, stimulate the narrative interpretation, and activate the insights by pressing on the personalities potentials. The ability to select the appropriate artworks is the result of a multi annual experimentation carried out on a significant sample, on the basis of a specific and integrated skill, in the psycho-therapeutic and artistic fields (Russo, 2013).

The Videoinsight® method has been tested in the psychological and medical clinical settings: (1) for the diagnosis of the personality structure and functionality; (2) for the analysis of the request of psychological support, and for the discovery of the capacities of reliance, collaboration, motivation within the relations with the others; (3) for the prevention of the psychological distress related to the evolutionary crisis (in the adolescence, in the disengaging in adult age, in the post-traumatic stress, in the psychosomatic problems and in the physical and senile illness); (4) for the orientation and the qualification of attitudes and talents, functional for the support of the personality’s healthy resources; (5) for the rehabilitation of the psychological resources as a result of impairment due to a physical illness, a trauma, a stress that transforms the vulnerability into a crisis or into an evolution stall; and (6) for the psychological support of personalities in crisis and for the psychotherapy dedicated to the solution of the problems, of the complexes, of the evolutionary difficulties, of the constraints, of the psychological and psychosomatic symptoms.

Significant results were obtained in cases of neuroses: generalized anxiety disorder, separation anxiety, obsessing, compulsion, panic attacks, anxiety, hysteria, phobia, agoraphobia, social phobia; post-traumatic stress disorder; sado-masochistic disorders; character disorders, narcissistic disorders of the personality, disorders with paranoid traits, border-line disorders; avoidance disorders, passive aggressive disorders of the personality; disorders from dependences (from substance use: food, alcohol, tobacco, opiates, cannabis, sedatives, hypnotics, barbiturates; from the game, from internet, from the couple, of symbiotic type, from the failure of leaving the
family); psychosomatic disorders, somatoforms, from conversion, psychogenic; hypochondria: psychosexual disorders, adaptation disorder, affective disorder, depressions.

Description

In January 2012, Dr. Rebecca Luciana Russo introduced the Videoinsight® method in an experimental annual medical research, regularly approved by the Institutional Ethical Committee. This first Research has been performed with the most rigorous methods of international research protocol and has been conducted at Rizzoli Orthopaedic Institute in Bologna, Italy. The title of the study was: “Video-Acl Research: The application of the Videoinsight® Method to improve the functional recovery after anterior cruciate ligament reconstruction”. The experimental protocol has been conducted in collaboration with Prof. Maurilio Marcacci and Prof. Stefano Zaffagnini’s equipe. Specifically, Rebecca Russo has shown to 100 adult patients, during the rehabilitation program, 16 artistic videos selected and evaluated according to their high or low Videoinsight® impact. The objective of the study has been to evaluate the efficacy of Videoinsight® method in improving and speed up the functional recovery of patients during the rehabilitation phase after anterior cruciate ligament reconstruction surgery of the knee. For the first time, the contemporary art is used according to this innovative approach in medicine, as a rehabilitation support. The results of this research have been significant and have been published in International Scientific Journal in January 2013 (Zaffagnini, Russo, Marcheggiani Muccioli, & Marcacci, 2013).

In June 2013, a second experiment for the application of the Videoinsight® method in medicine has started at Rizzoli Orthopaedic Institute in Bologna. The name of this new research is “Video-TKA (Total Knee Arthroplasty)”. It is an annual experimental research protocol regularly approved by the Ethical Committee and will follow the most rigorous scientific methods of international research protocol. The title is “The use of the Videoinsight® method to improve the physical recovery after cemented total knee prosthetic implant”. The study is performed in collaboration with the Physical Therapy and Rehabilitation Department of Rizzoli Orthopaedic Institute directed by Prof. Maria Grazia Benedetti and with the Second Orthopaedic Department of Bologna University.

In this study, 100 elderly patients that underwent total knee prosthesis will perform the rehabilitation program with the support of the Videoinsight® method. Specifically, it shows 4 artistic videos selected for their high Videoinsight® impact to 100 old patients that perform rehabilitation protocol after TKA surgery. The objective of the study is that “The use of Videoinsight® method positively influences the pain level and the functional post-operative recovery of patients operated of total knee prosthesis at 3 months follow-up”.

At international level the application of the Videoinsight® method is performed in a pilot multicentric study to treat the anterior knee pain in young patients with patello-femoral problems not suitable for surgical treatment. This study is executed simultaneously: at University of Minnesota in Minneapolis Orthopaedic Surgery Centre directed by Prof. Elisabeth Arendt, M.D., in France at the Lyon Orthoclinic Chirurgie du Sport et de l’Arthrose directed by Prof. David Dejour and in Japan at the Kobe University in cooperation with Prof. Ryosuke Kuroda. The title is “The application of the Videoinsight® method for the treatment of anterior knee pain patients”. The Research is in cooperation with Prof. Stefano Zaffagnini at the Rizzoli Orthopaedic Institute in Bologna. It is the third experimental application of the Videoinsight® method in medicine. Moreover is the first international multicentre experimental application of Videoinsight® method in medicine. For the first time the Videoinsight® method is utilized as a therapy and not only as a support to a post surgical Rehabilitation protocol.
Materials and Methods

To describe more in details the study performed after ACL reconstruction (Zaffagnini et al., 2013), we built a single blinded parallel arm randomized controlled trial between February 2012 and October 2012. All patients more than 16 years-old undergoing the first-time ACL arthroscopic reconstruction on the injured knee and that gave written consent to undergo study procedure were enrolled. Patients with combined lesions or disorders were excluded.

Approval was obtained from the IRB (Internal Review Board) of Istituto Ortopedico Rizzoli, Bologna, Italy, according to the official guidelines of the Declaration of Helsinki. All subjects were informed about the study procedure.

Computerized randomization generated two groups: Group A and Group B.

The standard surgical procedure was performed in all ACL reconstructions. In particular, over-the-top single bundle with the additional extra-articular tenodesis on the lateral compartment, was performed in all patients using autologous semitendinosus and gracilis tendons (Marcacci, Zaffagnini, Giordano, Iacono, & Presti, 2009; Marcacci, Zaffagnini, Iacono, Neri, Loreti, & Petitto, 1998).

All patients underwent the same standardized post-operative rehabilitation protocol, with no brace. Quadriceps exercises started on the first post-operative day. Patients were allowed to partial weight bearing during the first two weeks. Full weight bearing was allowed from the third week. Running was recommended after two months, and cutting and lateral sports were allowed four months after surgery (Cupal & Brewer, 2001; Decarlo, Shelbourne, McCarroll, & Rettig, 1992; Zaffagnini, Bruni, Marcheggiani Muccioli, Bonanzinga, Lopomo, Bignozzi, & Marcacci, 2011).

According to the Videoinsight® method, Group A (study group) received one art video that was established to produce positive and therapeutic “insight”, while Group B (control group) received one art video with an “insight” unfavourable to the psychological recovery.

The art videos for Group A were selected according to the following 10 principles of the Videoinsight® method:

(1) The video shows powerful images, with or without sounds, that quickly and deeply penetrate the unconscious of the patient;
(2) It expresses universal messages related to the primary needs of life;
(3) It stimulates the mind at a conscious level (intellectual comprehension) and the affectivity at an unconscious level (emotive resonance);
(4) It contains metaphors with therapeutic potential;
(5) It stimulates narrative processes: story telling, interpretation and trauma elaboration;
(6) It promotes identification, reflection, projection and transfer process;
(7) It activates insight that means interior intuition, consciousness raising, psychological transformation;
(8) It reduces the resistance;
(9) It increases creativity;
(10) It catalyzes the change;

The art videos for (control) Group B were selected in contrast to the same principles.

All the patients had to watch the video 2 times a week, during the first 3 months. The lists of art videos used for Group A and for Group B are reported in Table 1.
Examples of the two different types of videos are given in Figures 1 and 2.

The Videoinsight® method requires a selection of contemporary art videos based on the diagnosis of the specific psychological needs of the patient. In this case, considering the necessity to rehabilitate the motor function of the strolling, the following needs of the operated patients were diagnosed a priori: the confidence, the patience, the motivation, the resistance, the collaboration, the commitment, the perseverance.

The videos used in the research were selected by the trained psychotherapist among those previously experienced for 10 years in the clinical setting with different types of patients (anxious, depressed, obsessive, psychosomatics, and dependent). The method is the result of a trial of hundreds videos in hundreds clinical cases. In this long history of application of the Videoinsight® method in clinical cases, several videos were effective in helping people with different symptoms. The videos used contain messages that stimulate the insight, are easy to interpret, activate the storytelling, show performances made by the artists themselves or by third parties.

Table 1
List of the Selected Art Works for the Treatment and Control Groups

<table>
<thead>
<tr>
<th>Treatment group</th>
<th>Title</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dying Swans</td>
<td>Elena Kovylina</td>
<td>2007</td>
</tr>
<tr>
<td></td>
<td>Forever Overhead</td>
<td>Marzia Migliora</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>Over the Sea</td>
<td>Sophie Whetnall</td>
<td>2007</td>
</tr>
<tr>
<td></td>
<td>Piel</td>
<td>Regina José Galindo</td>
<td>2001</td>
</tr>
<tr>
<td></td>
<td>Daniela Ha Perso il Treno</td>
<td>Sissi</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Dance Company</td>
<td>Ali Kazma</td>
<td>2009</td>
</tr>
<tr>
<td></td>
<td>My Love Is an Anchor</td>
<td>Kate Gilmore</td>
<td>2007</td>
</tr>
<tr>
<td></td>
<td>Someone Say the Moon Is Easy to Touch</td>
<td>Driant Zeleny</td>
<td>2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control group</th>
<th>Title</th>
<th>Author</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1969</td>
<td>Goldie Chiari</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>To Ann Marie</td>
<td>Lindholm Petra</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>Made in Box</td>
<td>Mari Sue</td>
<td>2008</td>
</tr>
<tr>
<td></td>
<td>It, Heat, It</td>
<td>Provoust Laure</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>The Artist</td>
<td>Provoust Laure</td>
<td>2010</td>
</tr>
<tr>
<td></td>
<td>Singspiel</td>
<td>Von Brandenburg U.</td>
<td>2009</td>
</tr>
<tr>
<td></td>
<td>The Descend of Man and Selection in Relation to Sex</td>
<td>Mona Chisa Anneta &amp; Tkaoova Lucia</td>
<td>2010</td>
</tr>
</tbody>
</table>

In the Research VideoACL, the video was shown to the hospitalized patient in bed, for the first time through a PC in the hospital, the day after the operation. Subsequently, the patient has seen the video at home in autonomy, through a demo video, with a frequency of three times a week for three months. A skilled operator was present during the first application only, then the patient has watched the video alone. The operator has given to him a technical schedule on which he should write all the feelings, thoughts, stories stimulated by the vision of the video. This schedule has been used by the patient for the entire duration of his treatment.

The patient was motivated to look at the video from the psychotherapist in charge of the research and from the Doctor that performed the surgery, with the same issue: “Do you want to watch a video of contemporary art that contains therapeutic incentives during your convalescence? We do recommend it”. The patient received the
indication to watch the video in silence, several times, being alone, to take note and to review the spontaneous insights on the schedule. This document has been subsequently consigned to the Doctors Team at the end of the treatment and has been always checked during the clinical visits. The “insight schedule” becomes a sort of personal psychotherapeutic diary for each patient.

Figure 1. Example of an art video used for the Treatment Group: Migliora M. Forever overhead, video still (2010). Courtesy of Videoinsight® Center, Turin, Italy.

Figure 2. Example of an art video used for the Control Group: Mona Chisa A, Tkacova L. The descend of man and selection in relation to sex, video still (2010). Courtesy of Videoinsight® Center, Turin, Italy.
It was decided to show videos to the control group as well, because the objective of the research was not to demonstrate the effectiveness of watching a video, but the effectiveness of watching certain types of selected videos, containing specific therapeutic messages. The control group components have watched videos without a therapeutic content, in other words placebo videos.

The application of the method did not present particular difficulties. The method is applicable in other areas of clinical research. Any future research will require a different selection of videos, according to the objectives of the psychological support that will be pursued.

Results

One-hundred and one patients were evaluated at mean 3.0 ± 0.2 months follow-up (see Table 2).

### Table 2

**Demographic, Surgical, and Follow-Up Details of the Patients Involved in the Study**

<table>
<thead>
<tr>
<th></th>
<th>Treatment group</th>
<th>Control group</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at surgery (years)</td>
<td>33.8 ± 11.1 (18-41)</td>
<td>32.9 ± 12.5 (18-40)</td>
<td>p = 0.5371</td>
</tr>
<tr>
<td>Final follow-up (month)</td>
<td>3.0 ± 0.2 (2.8-3.1)</td>
<td>3.0 ± 0.2 (2.8-3.2)</td>
<td>p = 0.4325</td>
</tr>
<tr>
<td>BMI at surgery (kg/cm²)</td>
<td>24.1 ± 2.2 (22-29)</td>
<td>23.8 ± 2.2 (22-29)</td>
<td>p = 0.8972</td>
</tr>
<tr>
<td>BMI at final follow-up (kg/cm²)</td>
<td>24.0 ± 2.7 (23-29)</td>
<td>23.7 ± 2.7 (23-29)</td>
<td>p = 0.4517</td>
</tr>
<tr>
<td>From injury to surgery (months)</td>
<td>5.8 ± 2.1 (1-9)</td>
<td>6.1 ± 2.9 (1-8)</td>
<td>p = 0.7435</td>
</tr>
<tr>
<td>Sex (Male/Female)</td>
<td>40 (78%)/11 (22%)</td>
<td>40 (80%)/10 (20%)</td>
<td>p = 0.5643</td>
</tr>
<tr>
<td>Knee involved (Right/Left)</td>
<td>24 (47%)/25 (53%)</td>
<td>21 (42%)/29 (58%)</td>
<td>p = 0.4987</td>
</tr>
</tbody>
</table>

The two groups were homogeneous regarding pre-operative age, gender, weight and height, interval from injury to surgical treatment, subjective IKDC (International Knee Documentation Committee), Tegner, SF-36 and TSK (Tampa Scale of Kinesiophobia) scores (Apolone & Mosconi, 1998; Monticone, Giorgi, Baiardi, Barbieri, Rocca, & Bonezzi, 2010; Padua, Bondi, Ceccarelli, Bondi, Romanini, Zanoli, & Campi, 2004; Tegner & Lysholm, 1985).

All scores significantly improved (p < 0.05) from pre-operative status to final follow-up in both groups.

Significant improvements were observed in Group A compared to Group B at final follow-up for subjective IKDC (p = 0.047), TKS (p = 0.0141) and time to crutches discharge (p = 0.0012) (see Table 3). No significant difference between Group A and Group B for tegner score, SF-36 physical status, although a positive trend for Group A was detected (see Table 3).

### Table 3

**Clinical Outcome Scores at Three Months Follow Up**

<table>
<thead>
<tr>
<th>Score</th>
<th>Treatment group</th>
<th>Control group</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective IKDC</td>
<td>82.0 ± 13.8</td>
<td>71.0 ± 19.7</td>
<td>p = 0.0470*</td>
</tr>
<tr>
<td>SF-36 Mental</td>
<td>50.9 ± 8.7</td>
<td>50.9 ± 7.3</td>
<td>p = n.s.</td>
</tr>
<tr>
<td>SF-36 Physical</td>
<td>55.6 ± 8.2</td>
<td>52.6 ± 8.4</td>
<td>p = n.s.</td>
</tr>
<tr>
<td>Tegner Activity Level</td>
<td>5 ± 4.6</td>
<td>4 ± 3.6</td>
<td>p = n.s.</td>
</tr>
<tr>
<td>TSK</td>
<td>28.1 ± 6.0</td>
<td>32.0 ± 5.8</td>
<td>p = 0.0141*</td>
</tr>
<tr>
<td>Crutches (Days)</td>
<td>20.9 ± 5.0</td>
<td>26.5 ± 8.2</td>
<td>p = 0.0012*</td>
</tr>
<tr>
<td>Objective IKDC</td>
<td>33A, 18, 0C, 0D</td>
<td>33A, 17B, 0C, 0D</td>
<td>p = n.s.</td>
</tr>
</tbody>
</table>
Discussion

The most important finding of this prospective randomized study was that the use of the Videoinsight® method during the early rehabilitation phase after an ACL reconstruction permits to increase the subjective outcomes at three months.

This is the first study where the Videoinsight® method has been applied in Orthopaedics to improve the global functional and psychosomatic results after surgery, while it has already been applied with highly satisfactory results in psycho-diagnosis and psychotherapy (Marcacci et al., 2009; Marcacci et al., 1998). This method is unique because it does not utilize simple image or modelling video but it combines the power of images itself with the emotional one given by the artistic world.

Various psychological interventions have been proposed or utilized in the injury recovery setting. These include imagery (Ievleva & Orlick, 1991; Sordoni, Hall, & Forwell, 2000; 2002), goal setting (Theodorakis, Beneca, Malliou, & Goudas, 1997), electromyographic biofeedback (Levitt, Deisinger, Remondet, Ford, & Cassisi, 1995) and stress inoculating training (Ross & Berger, 1996).

Motor imagery is a technique that is overlapping with physical execution, since it activates the same brain regions used during motor performance. For the equivalence between imagery and action, motor imagery has been a used strategy to improve motor performance in rehabilitation and variety of sport (Sordoni, Hall, & Forwell, 2000; 2002).

Another technique that has received limited attentions during rehabilitation is the observational learning or modelling (Apolone & Mosconi, 1998). Only two studies have analysed the efficacy of such strategy during ACL rehabilitation.

Flint (1991) examined the role of coping models compared to no models on psychological factors and functional outcome following a rehabilitation programme for ACL reconstruction among 10 basketball players. The study showed increased self-efficacy at three weeks after surgery in patients watching a modelling videotape.

Maddison, Prapavessis, and Clatworthy (2006) evaluated the efficacy of modelling video to reduce pre-operative perception of anxiety and pain as well as post-operative self-efficacy and functional outcome after anterior cruciate ligament reconstruction. They reported significantly lower perceptions of expected pain pre-operatively and significantly greater self-efficacy at pre-discharge to perform rehabilitation tasks, confirming that watching a modelling videotape is effective in increasing rehabilitation self-efficacy and early function. Although effective in reducing pain and increasing self-efficacy, Maddison et al. (2006) reported that the self-efficacy was more related to the enactive master experience gained during exercise. Moreover, the analysis failed to show that modelling interventions could enhance psychological factors capable to enhance functional variables.

In the present study, on the contrary, it was demonstrated that the use of the Videoinsight® method in the early rehabilitation phase after ACL reconstruction through a psychological insight can promote a subjective and mental improvement. The Videoinsight® method originality is to combine the effect already observed by using images, with the emotional one achieved by using contemporary artworks. These specific images permit higher self-consideration, increasing the intrinsic motivation to work and problem solving. Moreover, improve autoplastic adaptation to reality, the stress reaction flexibility to adverse event and increase the resistance capacity to exercise and fatigue. Images with high psycho-diagnostic and psychotherapeutic potential can treat
the symptoms of psychological and psychosomatic discomfort that accompany the disease and can enhance the cognitive, emotional and behavioural resources needed to tackle the path of evolution, care and rehabilitation. It is not a coincidence that the Rorschach Test, the world-class excellence tool adapted for the diagnosis of profile and personality functioning, consists of the administration, qualitative and quantitative analysis, and interpretation of projective answers provided by candidates in response to ten ink-stain images.

Art is symbolic. It is the archetypal possibility to have primordial images which echo the voices of all of humanity; it contains subconscious and innate ideas, which are repeated throughout history, whenever the creative imagination of the individual is practiced freely (Russo, 2011; 2012; 2013).

The Videoinsight® method is original and different compared to the modelling techniques (Flint, 1991; Maddison, Prapavessis, & Clatworthy, 2006), because it relies on the capacity of the art video images to promote an intrinsic elaboration at the psychological level. It was capable not only to speed up the rehabilitation period (as described by Maddison et al. (2006) and Flint (1991)), but also to enhance patient’s motivation and self-esteem as shown by the low mean TSK reported for Group A. TSK and the time while the patients need to walk with crutches are directly correlated, demonstrating not only a psychological, but also a somatic effect of the method.

Unfortunately, the IRB refused to apply to each patient a psychological profile according to Rorschach tables (Schafer, 1954). In this way, we could have also analysed the different efficacy of the Videoinsight® method according to the psychological patients profile and probably could have been capable to detect which patients could have had better benefit from the view of artwork, and secondly we could have been more selective in which type of artwork showing to the patients according to his psychological profile.

This approach, with its intrinsic capacity to promote the change could have other interesting applications in the treatment of other orthopaedic pathologies where the psychological support and the psychological patient profile are important. This methodology could become a universal method to support the patients not from the somatic only, but also from the psychological point of view, considering the patient as a global unit that includes body and mind.

Conclusions

This is the first time that not only video technology, but also the power of art are used in conjunction to enhance the recovery after surgery in order to treat the patients as a global unit including all aspects: anatomical, functional, and psychological.

The Videoinsight® method combined to adequate rehabilitation could be an effective tool in the day-by-day clinical practice in order to improve short-term functional outcomes in patients who underwent ACL reconstruction.

References


