

Body Donation and Plastination - Are Government and Anatomical/Forensic societies listening

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ABSTRACT

Background: Plastination is an emerging trend amongst Anatomists worldwide and more and more workshops are being conducted in India training anatomists for preparing plastinates. Plastination has been viewed as an asset and its shortcomings ignored. The consent for displaying body as plastinate is a major issue. Religious objections considering plastination against reverence towards human body should also be considered. Also donations of bodies for plastination would deprive the health service of organs for transplant. Promotion and creation of 'sex plastinates' is another matter of immense concern. **Methods:** A structured Questionnaire was prepared in view of the available literature to ascertain the current opinion of Indian anatomists regarding plastination as an alternative to embalming. **Results:** The results indicate that majority of the anatomists are in favor of the technique for teaching and exhibition. 96% of the anatomists believe that the anatomical societies should have a documented stand on Plastination and 65% feel that body donation for plastination would soon be a reality in India. **Conclusion:** The author recommends that import of plastinated bodies should be banned in India. Anatomical Society of India/Society of Clinical Anatomists should have a documented stand on Plastination for teaching purposes. For plastination exhibition in India a prior permission from Government of India alongwith monitoring of the exhibition by an anatomical board should be mandatory. Sale of Plastinates by Individuals/bodies/Institutions should be banned in India. In case of theft of plastinate, from a medical Institute informing the police should be made mandatory.

Keywords: Body Donation, Plastination.

INTRODUCTION

"What greater thing than to show off God's work?"
"There's nothing undignified about it."
"Turning death into entertainment takes away dignity and sanctity of human life that was lived"
Traditionally, medical schools have been the most common recipients of willed specimens. Then, in 1993, controversial German anatomist Gunther von Hagens emerged with an alternative. Von Hagens invented the process of plastination in the 1970s and has since processed hundreds of donated bodies and positioned them in a variety of poses playing sports, musical instruments, chess and poker for the exhibits that have visited dozens of cities around the world. Plastination is an emerging trend amongst Anatomists worldwide and

more and more workshops are being conducted in India training anatomists for preparing plastinates.

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Plastination has been viewed as an asset and its shortcomings ignored. The consent for displaying body as plastinate is a major issue. "Somebody at some level of government ought to be able to look at a death certificate, a statement from an embalmer, donation documents... That's a reasonable standard to apply. "Religious objections considering plastination against reverence towards human body should also be

considered. Also donations of bodies for plastination would deprive the health service of organs for transplant. Promotion and creation of 'sex plastinates' is another matter of concern.

Today, the possibility of India being viewed as a cheaper market for obtaining plastinates cannot be negated and as such there is need for law to be framed to prevent misuse due to lack of awareness of 'perils of plastination'. The author feels that the Anatomy and Forensic organizations /societies should come forward, debate and address the issues and provide recommendations to Government to sensitize and provide justified vigil to the issue.

MATERIALS AND METHODS

A structured Questionnaire was prepared in view of the available literature to ascertain the current opinion of Indian Anatomists regarding Plastination as an alternative to embalming.

Questionnaire

Kindly Answer in Yes/No:

1. Do you support plastination for purpose of exhibition to common people?
2. Do you believe import of plastinated bodies should be banned in India?
3. Do you believe Anatomical Society of India/Society of Clinical Anatomists/Forensic bodies should have a documented stand on Plastination for teaching purposes?
4. Do you agree that sale of plastinates by Individuals/bodies/Institutions should be allowed in India?
5. Do you think a plastination exhibition in India should be monitored by an anatomical board?
6. Do you feel plastinated specimen is more useful compared to the embalmed one for teaching purposes?
7. Do you think sale of commercial plastinated products for teaching will be successful in India?
8. Do you think body donation for plastination will soon be a reality in India?
9. Do you admire Gunther von Hagens and think he should be honored for his work?
10. Would you like to be a certified/ trained for Plastination?

RESULTS

The results are depicted in form of pie charts in [Figures 1-4] The results indicate that majority of the Anatomists are in favor of the technique for teaching and exhibition. 96% of the anatomists believe that the Anatomical societies should have a documented stand on

Plastination and 65% feel that body donation for plastination would soon be a reality in India. 80% agree that sale of plastinates by Individuals/bodies/Institutions should be allowed & 70% advocate that sale of commercial plastinated products for teaching will be successful in India

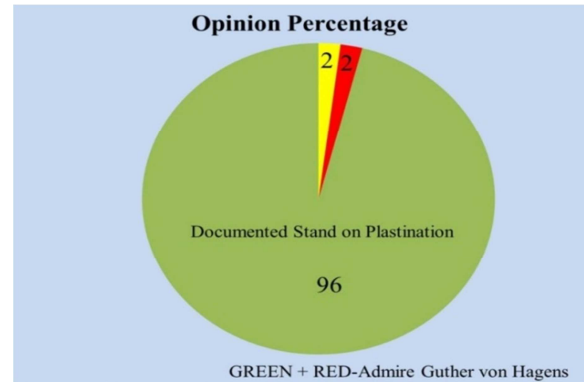


Figure 1:

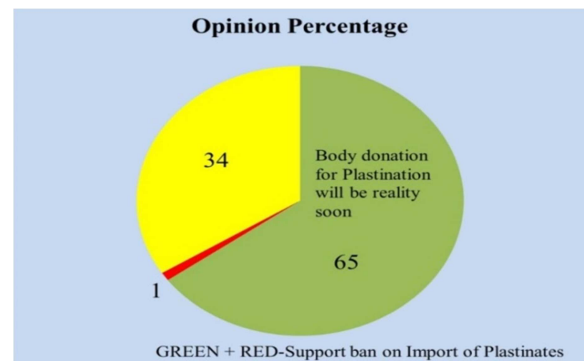


Figure 2:

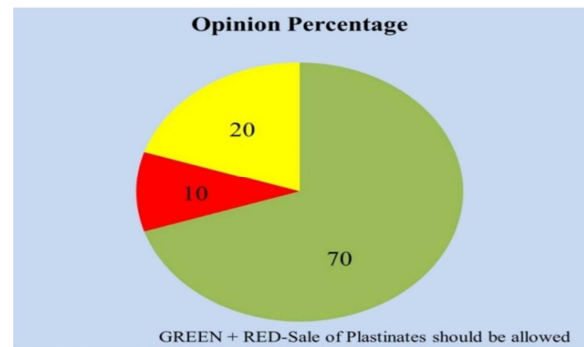


Figure 3:

98% admire Gunther von Hagens and feel he should be honored for his work.60% vouch that plastinated specimen is more useful compared to the embalmed one for teaching purposes. 66% support ban on import of plastinated bodies in India.Majority of these feel that the plastinated specimens should be produced in India and there is no need for import them.95% would

like to be certified/trained for Plastination. 70% support Plastination for purpose of Exhibition to common people.85% back the monitoring of such an exhibition by a certified anatomical board.

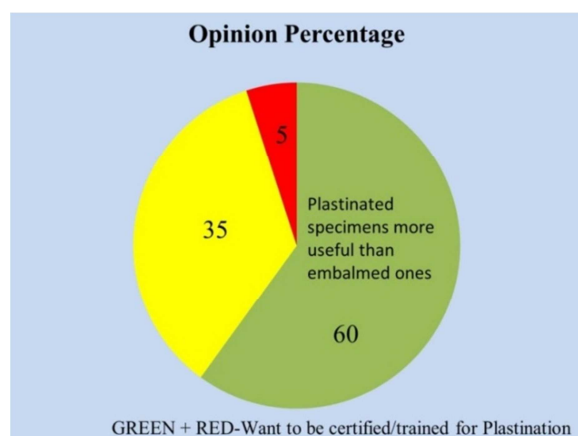


Figure 4:

DISCUSSION

The ‘phenomenon of plastination’ has provided another option for anatomists by increasing the range of specimens for teaching and research. Now more reaserch studies are including plastinated specimens.In European and advanced countries plastinated specimens are already being exhibited as ‘Anatomical art’.These exhibitions have found enthusiasts amongst the population and the day is not far off when the organizers of these exhibitions will shift focus upon India. These exhibition did an ethical debate about display of human specimens for entertainment or non-educational purposes.^[14,15] Issues like legal consent from the deceased and whether selling of platinates for institutional/personal profit is ethical demand immediate attention from the Government authorities and anatomical/forensic societies. A, strict legislative regulation is required to control exhibition, storage and preparation of plastinated bodies. A constant reappraisal of ethical and moral issues from the society are also needed from time to time for upgrading and implementing this plastinatio procedure for medical education. Appropriate rationale and relevant legislation with constant re-evaluation seems to be the only solution.

Some critics have questioned the educational value of plastinated human body and specimens. Other alternative methods like Color-coded casts of the specimens have proven invaluable for teaching medical gross anatomy. By acquiring greater understanding of the spatial relationship of overlapping organs, circulatory vessels and the lobes of the lungs, students

are better equipped to efficiently and accurately examine patients and to interpret diagnostic images of the body system.

The concern over consent of bodies being used in the plastination process is substantial.. Over 20 years ago, Von Hagens set up a body donation program in Germany and has signed up over 9, 000 donors into the plastination program and he followed strict consent procedures for whole-body specimens, but is this consent sufficient for different body parts, dissection and preparation for plastination? He stated that consent is not important for body parts. Most of people, even after filling donor form for plastination, don't think of autopsy or of being skinned in connection with plastination. This is because the words autopsy or dissection or skinning have a negative meaning in the moral society. Many donors want to be plastinated as a whole body; they don't like the idea of their body being sliced or their body being skinned. Several individuals and experts are against the display of plastinated bodies and believe that it is dehumanizing and the dead should not be made center of attraction for sake of public or education. The opinions can be critically summed up as “When you die, you should be allowed to die and rest in peace, not carted around the world as a laminated corpse or in pieces”.

International trade experts and ethicist have objected to the way in which bodies for commercial display are imported, because their categorization codes (as "art collections") do not require permission from health ministry of any country or death certificates issued by doctor, both of which are required for medical cadavers. In most countries plastinated human specimens are classified under customs classification code 97050000.48 which indicates “items in anatomical collections”. This customs code encompasses “zoological, botanical, mineralogical or anatomical collections or items in such collections.”^[16,17]

The author recommends

1. Import of plastinated bodies should be banned in India. Import should only be allowed after approval from an Anatomical Board and these bodies should only be utilized/displayed in teaching medical Institutes.
2. In all approved cases the consent should be clearly documented. Anatomical Society of India/Society of Clinical Anatomists/Forensic bodies should have a documented stand on Plastination for teaching purposes. This documented stand should be framed taking into view the sentiments of people of country as well as the need for advancement in research.
3. For plastination exhibition in India a prior permission from Government of India alongwith monitoring of the exhibition by an Anatomical board should be mandatory.

4. Sale of plastinates by Individuals/bodies/Institutions should be banned in India. In case of theft of plastinate, from a medical institute informing the police should be made mandatory.
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CONCLUSION

The Government has a responsibility and cannot overlook the morality of the situation. The current trends of utilizing and selling plastinates requires immediate government attention and legislation. A 'standard view and protocol' is required from anatomists and forensic experts to contribute to the ethical issues concerning plastination not only as 'custodians of the dead but also protectors of the living'.

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